

Read Me:

This document has two sections: (1) summary visualizations presenting the findings for all outcomes in one table and (2) detailed visualizations for each outcome, which include (a) a time-series of that outcome between the first semester of 2018 and the second semester of 2021, (b) impact estimates, and (c) parallel trends tests (PTT). See section **2.5 Empirical Strategy** for interpretation of the estimates.

The following notes apply to all regressions. The reference category for telehealth intensity (TH) is Low. The reference category for Year-Semester is 2019-2. The reference category for age composition is the percentage of beneficiaries younger than 65. The reference category for gender composition is the percentage of males. The reference category for racial composition is the percentage of non-Hispanic Whites. Standard errors are clustered at the Hospital Service Area level and are robust to heteroskedasticity.

Regression results are presented with different sets of covariates so that the interested reader can see the impact of the controls on the results. **Some Controls** models include average hierarchical condition category risk score and its square for fee-for-service (FFS) Medicare beneficiaries and count of new/cumulative COVID-19 cases per 10,000 persons. **Full Controls** adds the following to Some Controls: share of Medicare beneficiaries enrolled in FFS, share of FFS beneficiaries ages [65–74/75–84/85+], share of FFS [female/unknown sex] beneficiaries, share of FFS [Black/Hispanic/Asian/other/unknown race] beneficiaries, share of FFS beneficiaries [fully eligible/partially eligible] for Medicaid, share of FFS beneficiaries attributed to Alternative Payment Models, average Area Deprivation Index for FFS Medicare beneficiaries, and population size. **Full+GAFs** (geographic adjustment factor) models add the following to Full Controls: Inpatient Prospective Payment System hospital wage index and Physician Fee Schedule [physician work/practice expense/malpractice insurance] geographic practice cost indexes. **Full+Utilization** adds the following to Full Controls: in-person services per beneficiary.

Part 1/2: Summary of the Findings

1. The Main Findings
2. Controlling for the Geographic Adjustment Factors
3. Controlling for In-Person Utilization
4. Propensity Score Weighted DID Estimates
5. Excluding Small HSAs From the Sample

Blue, red, and gray colors denote positive and significant, negative and significant, and insignificant impact estimates, respectively. Checkmark denotes that PTT passes.

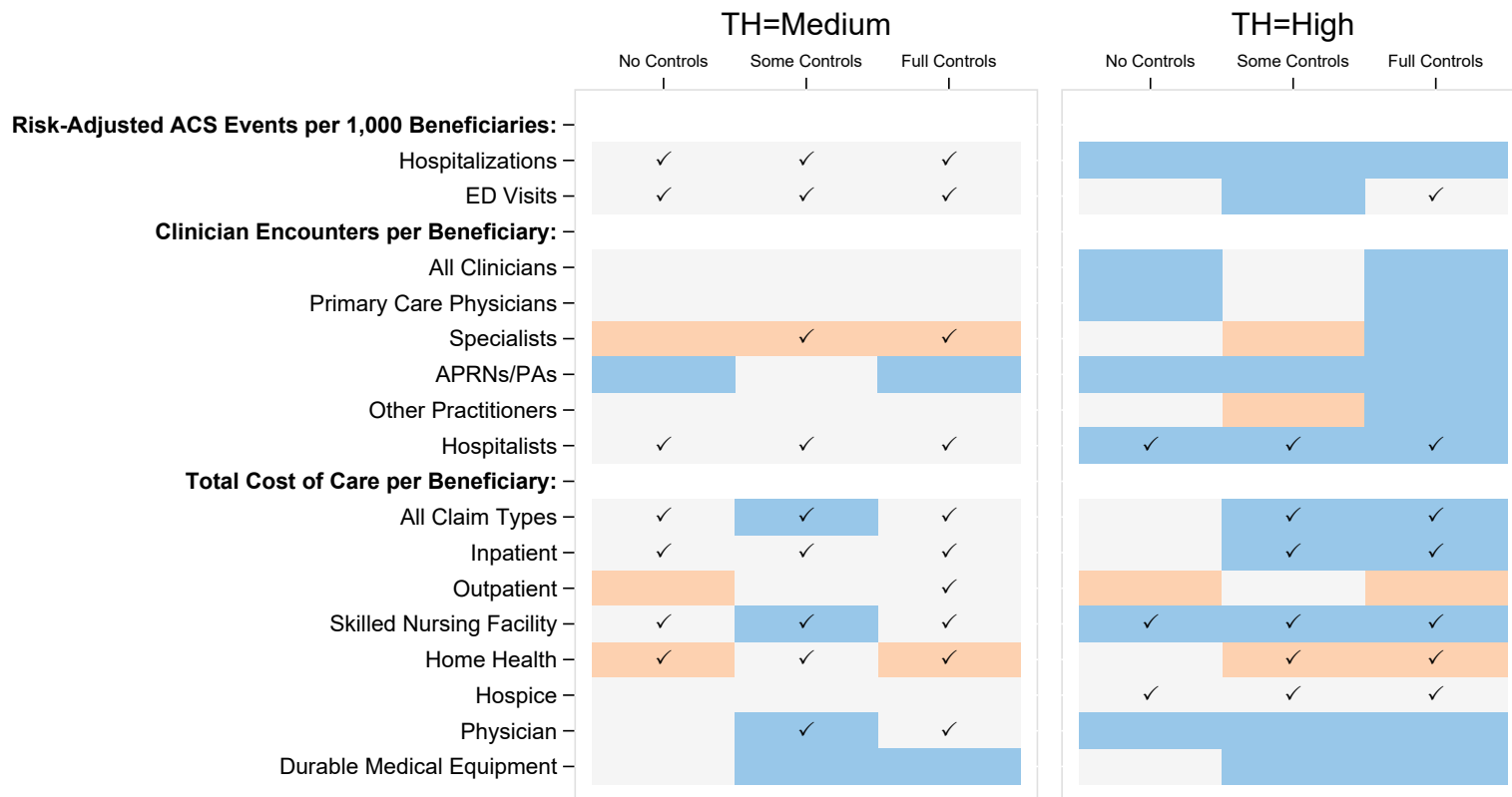


Exhibit-B1.2: Robustness to controlling for GAFs.
Blue, red, and gray colors denote positive and significant, negative and significant, and insignificant impact estimates, respectively. Checkmark denotes that PTT passes.

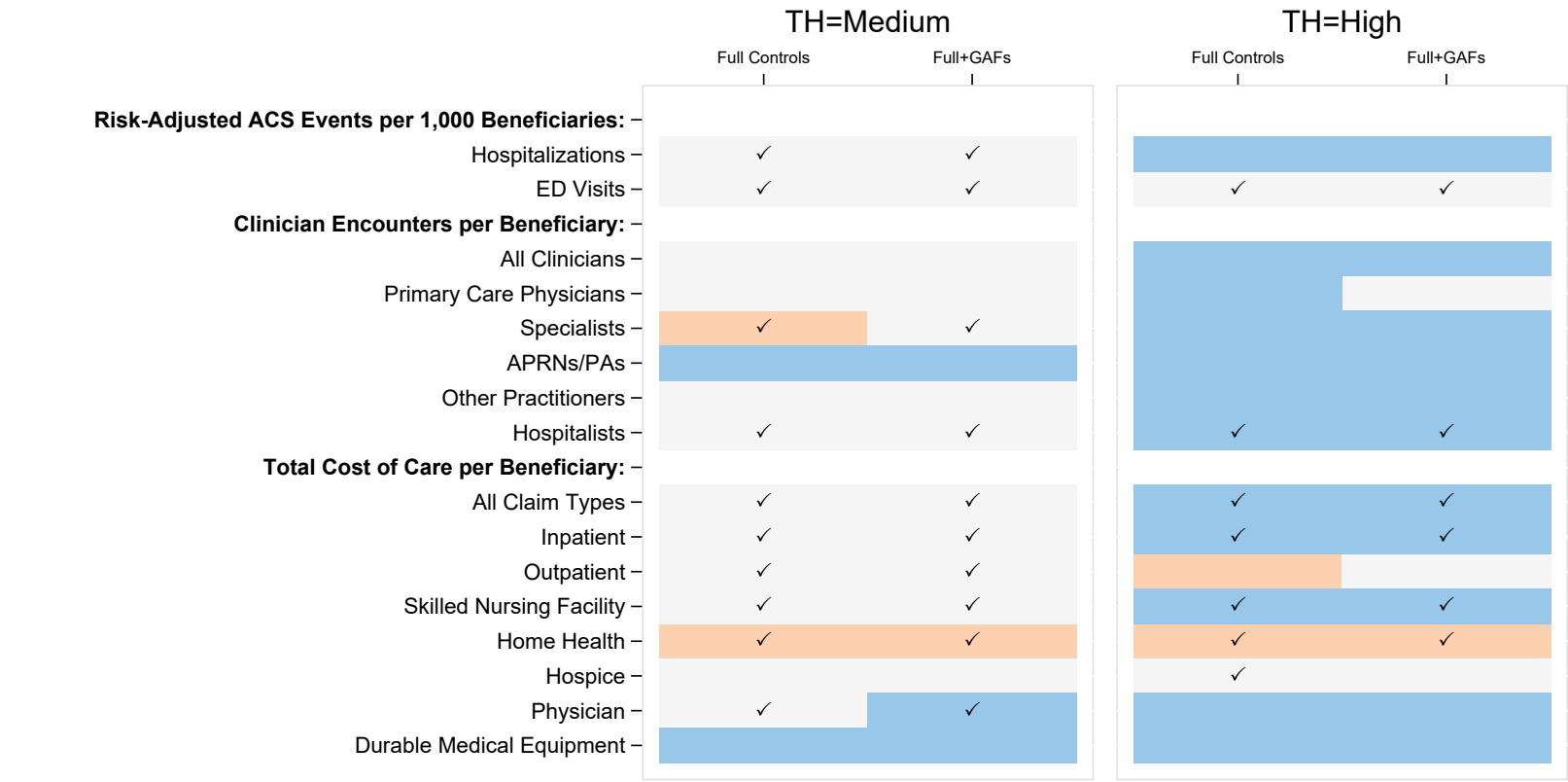
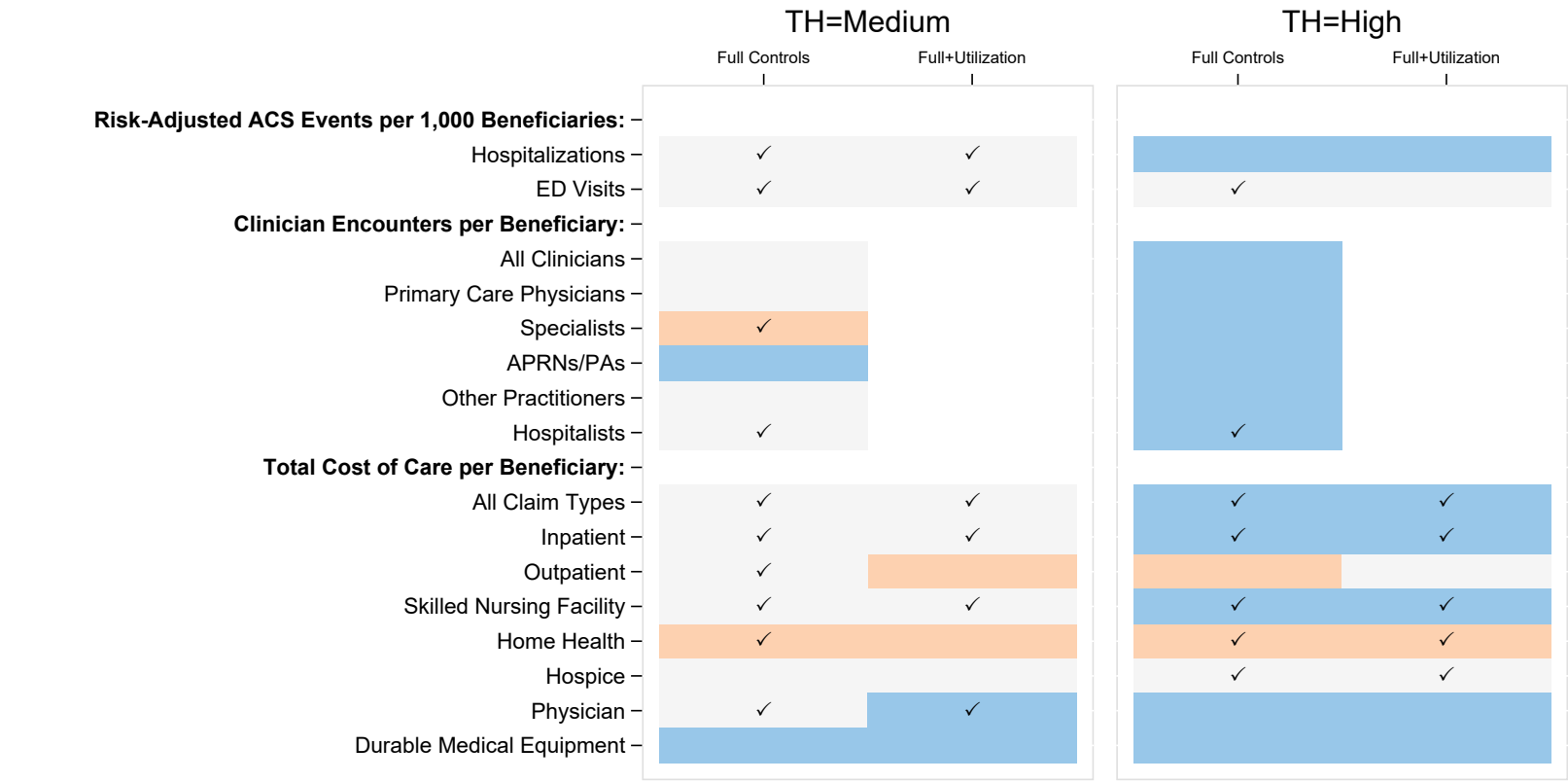


Exhibit-B1.3: Robustness to controlling for in-person utilization.
Blue, red, and gray colors denote positive and significant, negative and significant, and insignificant impact estimates, respectively. Checkmark denotes that PTT passes.



Blue, red, and gray colors denote positive and significant, negative and significant, and insignificant impact estimates, respectively. Checkmark denotes that PTT passes.

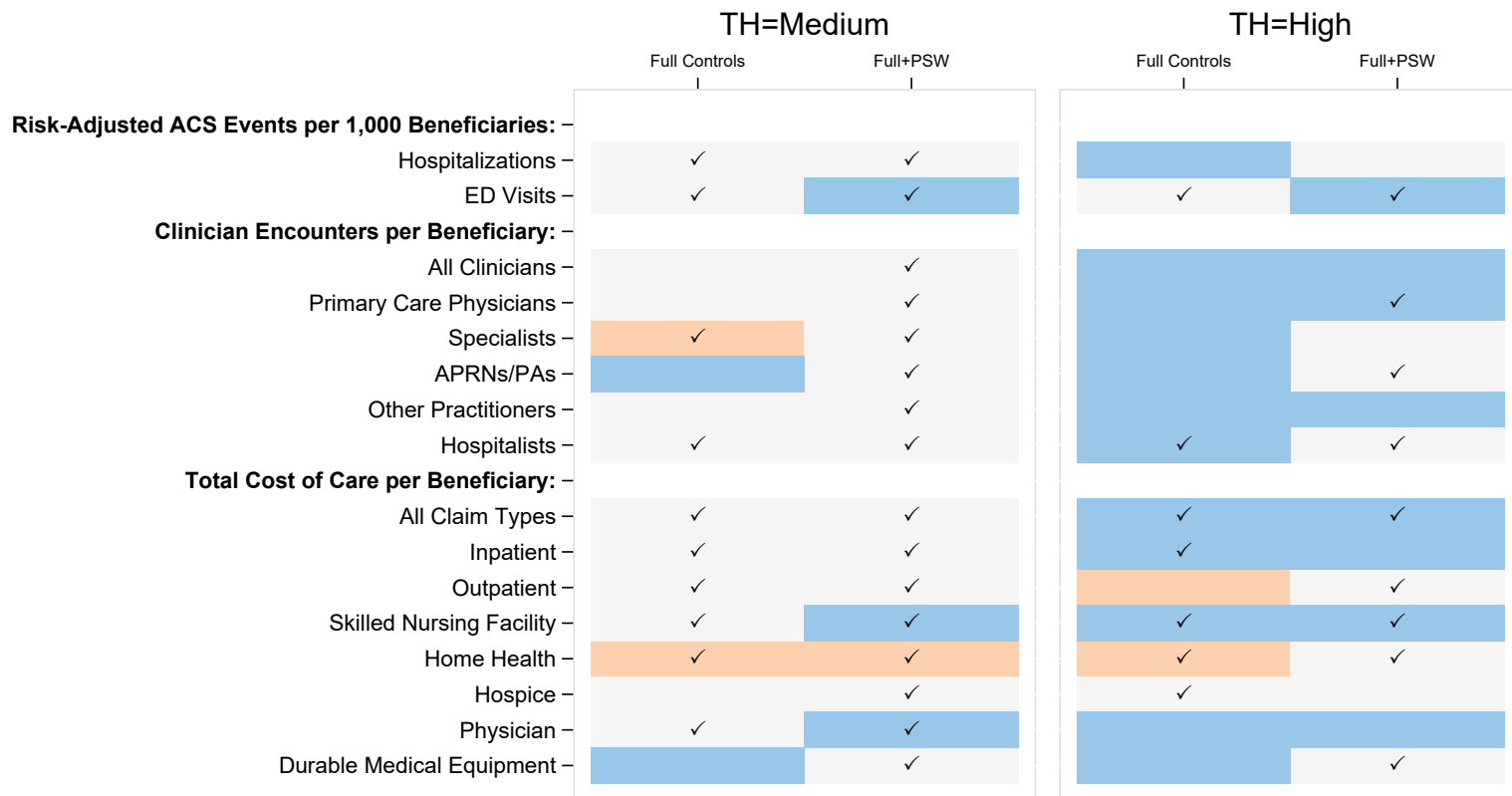
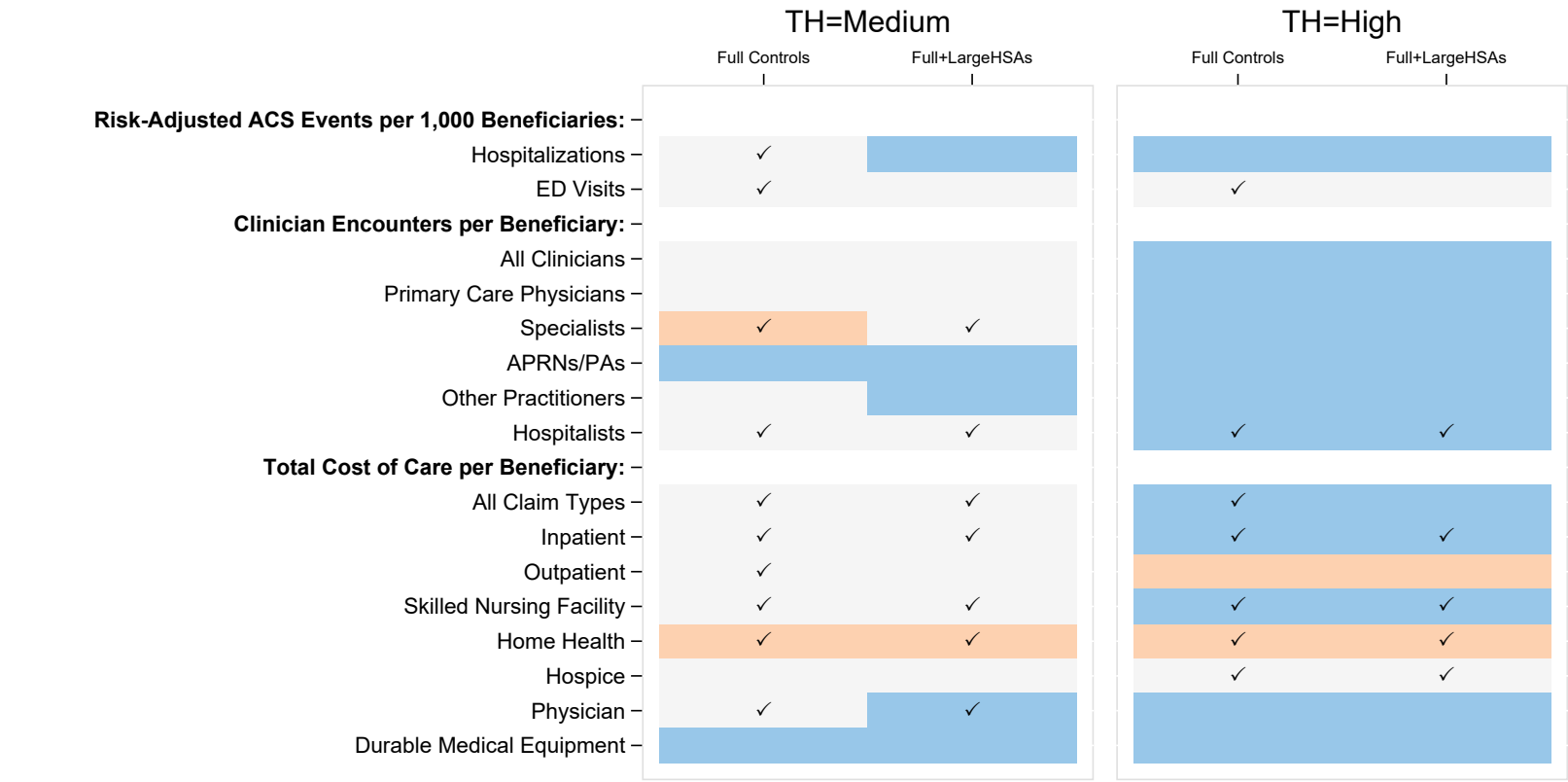


Exhibit-B1.5: Robustness to excluding small HSAs.
Blue, red, and gray colors denote positive and significant, negative and significant, and insignificant impact estimates, respectively. Checkmark denotes that PTT passes.



Part 2/2: Results by Outcome

1. Average Over Time
2. Impact Estimates and Their 90% Confidence Intervals
3. Parallel Trends Statistical Test

Exhibit B-2.1: HSAs are grouped by their telehealth usage. Then, average **Risk-Adjusted ACS per 1,000 Beneficiaries; Hospitalizations** is graphed over Year-Semesters.

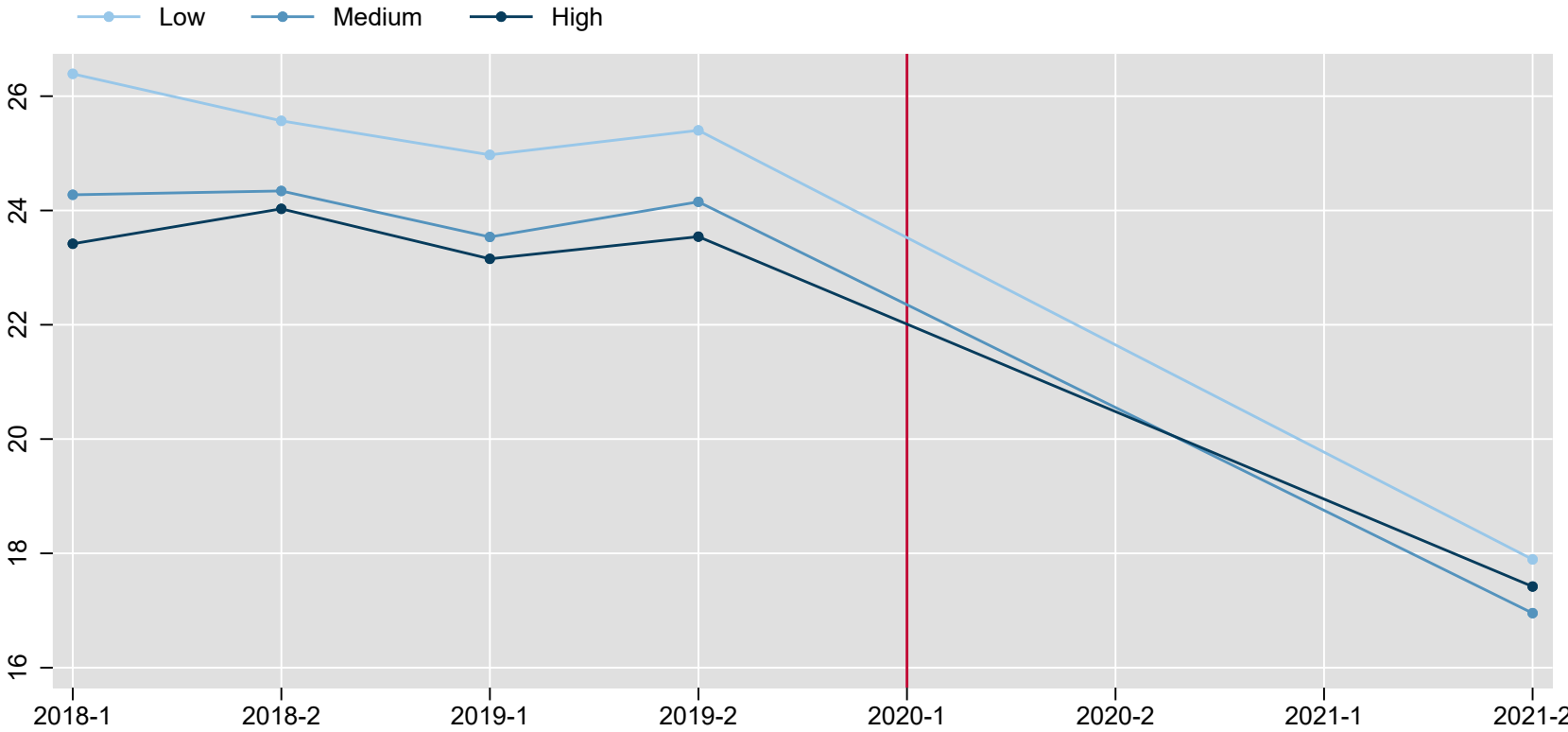


Exhibit B-2.2: Impact Estimates for Risk-Adjusted ACS per 1,000 Beneficiaries; Hospitalizations.

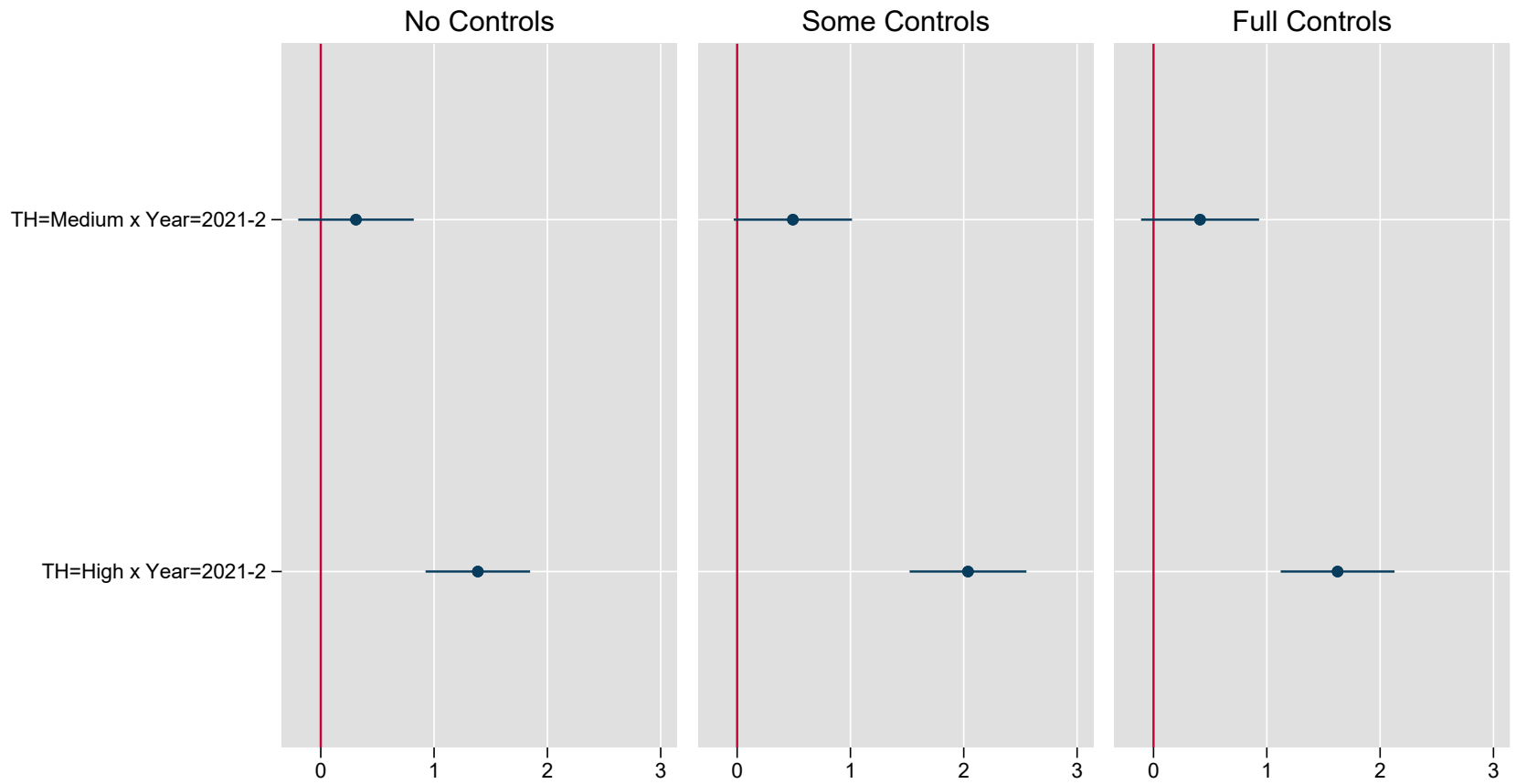


Exhibit B-2.3: Parallel Trends Test for Risk-Adjusted ACS per 1,000 Beneficiaries; Hospitalizations.

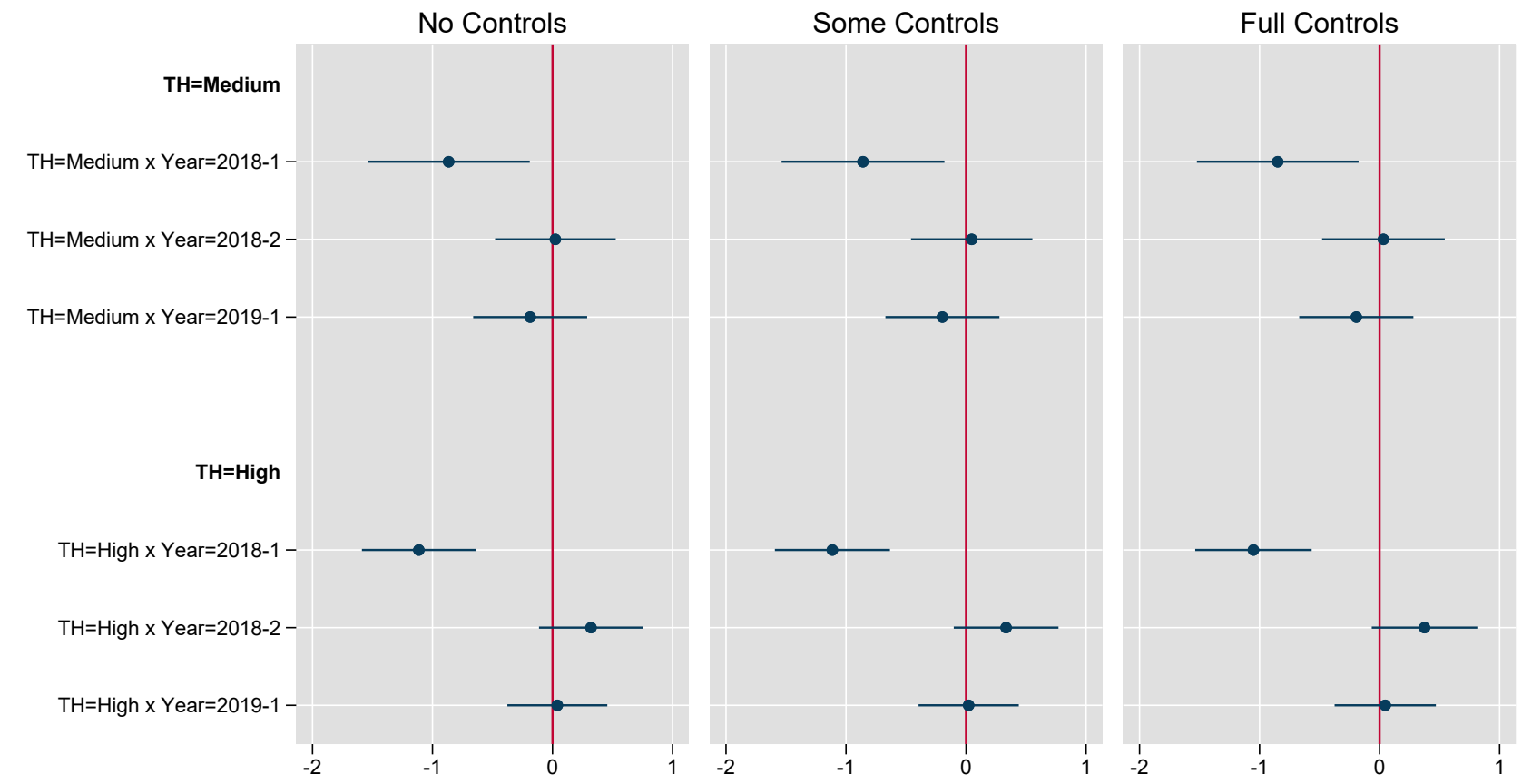


Exhibit B-3.1: HSAs are grouped by their telehealth usage.
Then, average **Risk-Adjusted ACS per 1,000 Beneficiaries; ED Visits** is graphed over Year-Semesters.

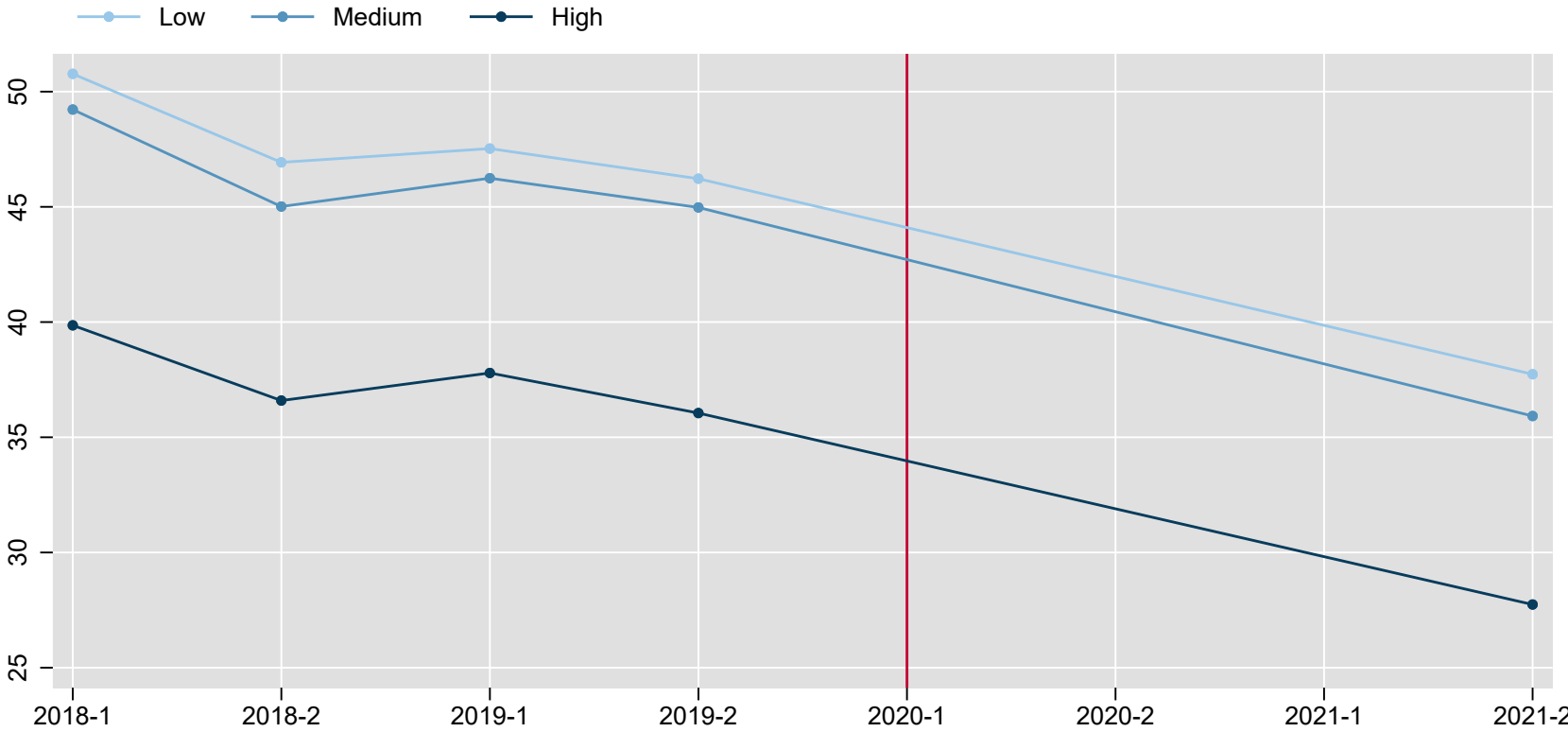


Exhibit B-3.2: Impact Estimates for Risk-Adjusted ACS per 1,000 Beneficiaries; ED Visits.

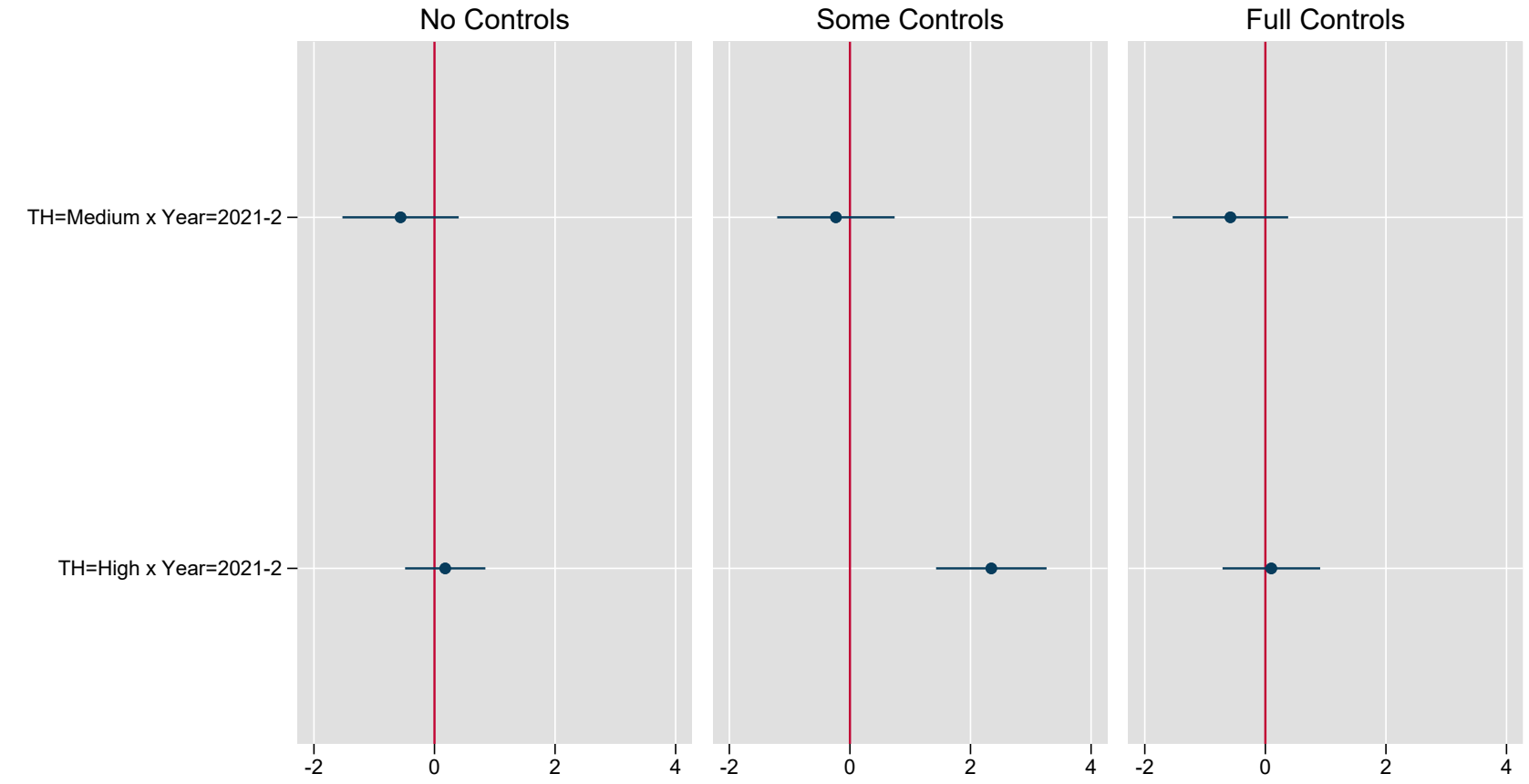


Exhibit B-3.3: Parallel Trends Test for Risk-Adjusted ACS per 1,000 Beneficiaries; ED Visits.

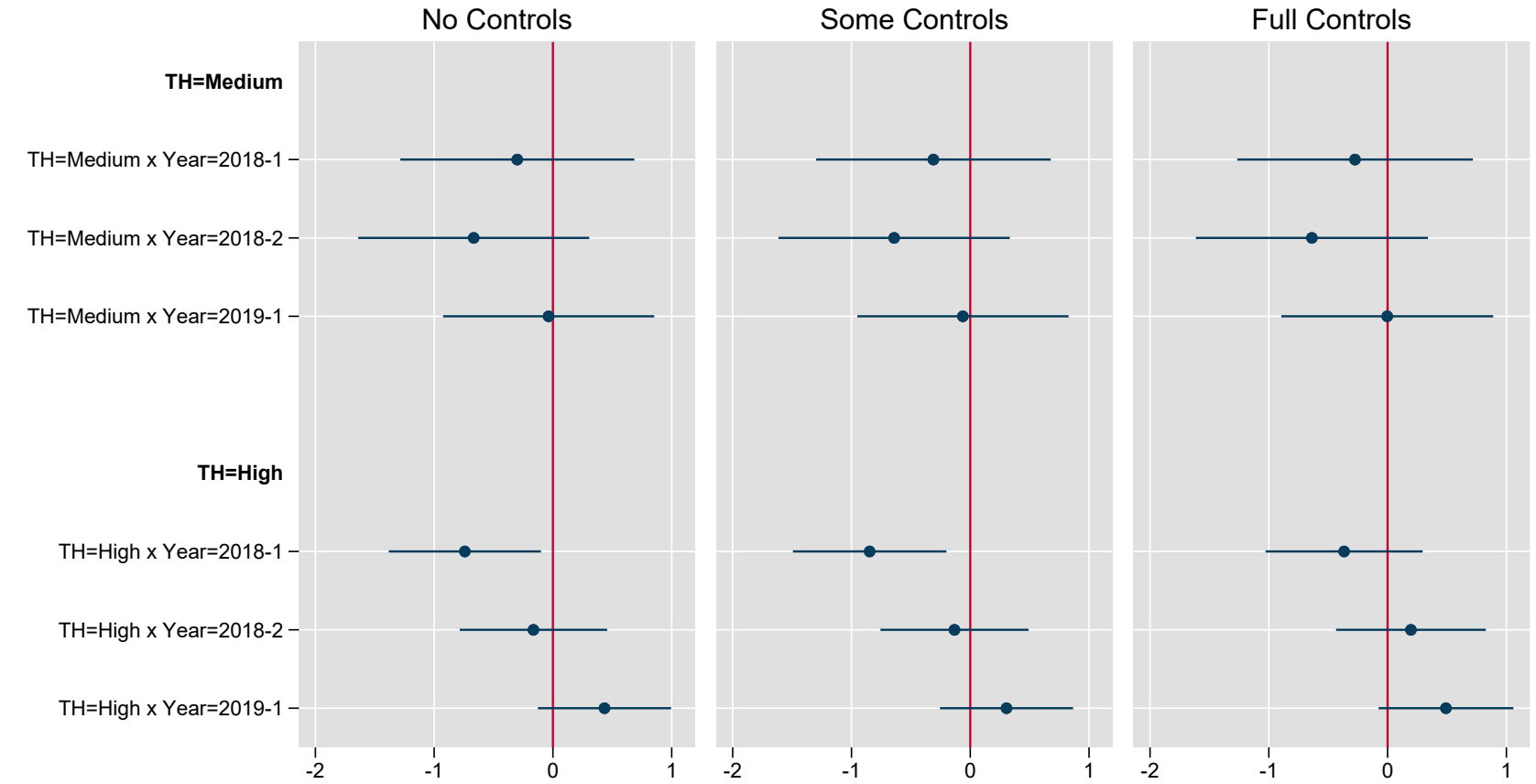


Exhibit B-4.1: HSAs are grouped by their telehealth usage.
Then, average **Clinician Encounters per Beneficiary** is graphed over Year-Semesters.

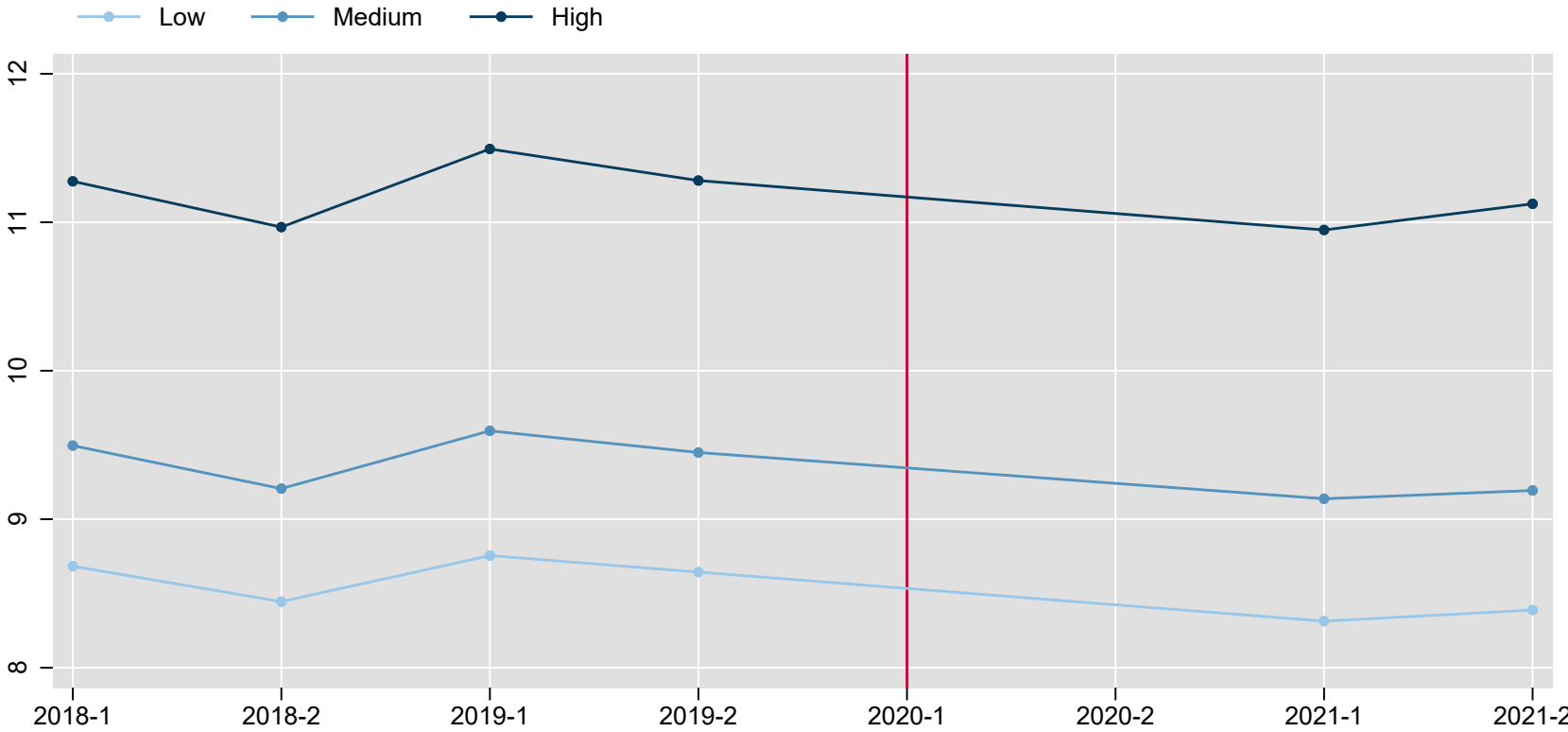


Exhibit B-4.2: Impact Estimates for Clinician Encounters per Beneficiary.

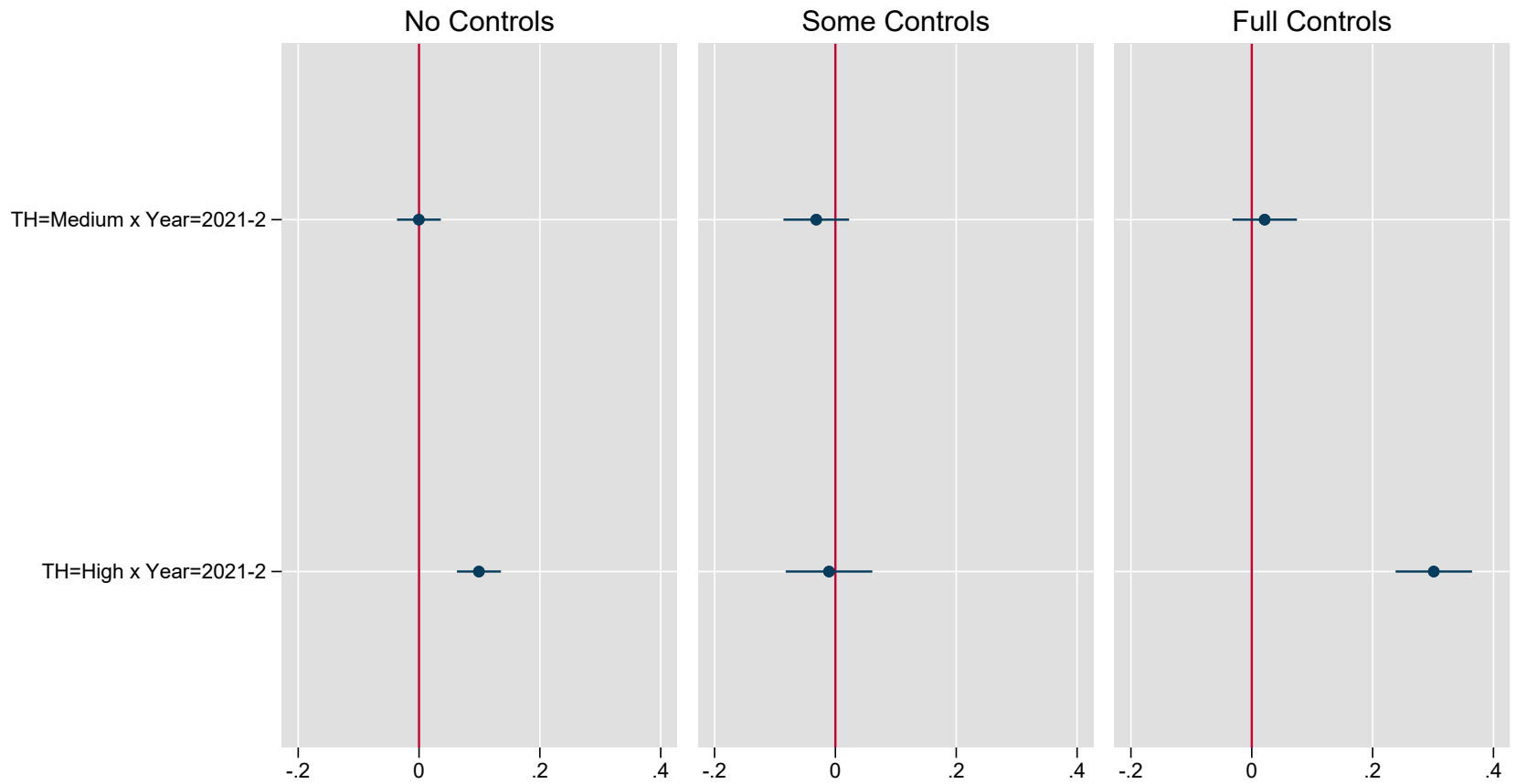


Exhibit B-4.3: Parallel Trends Test for Clinician Encounters per Beneficiary.

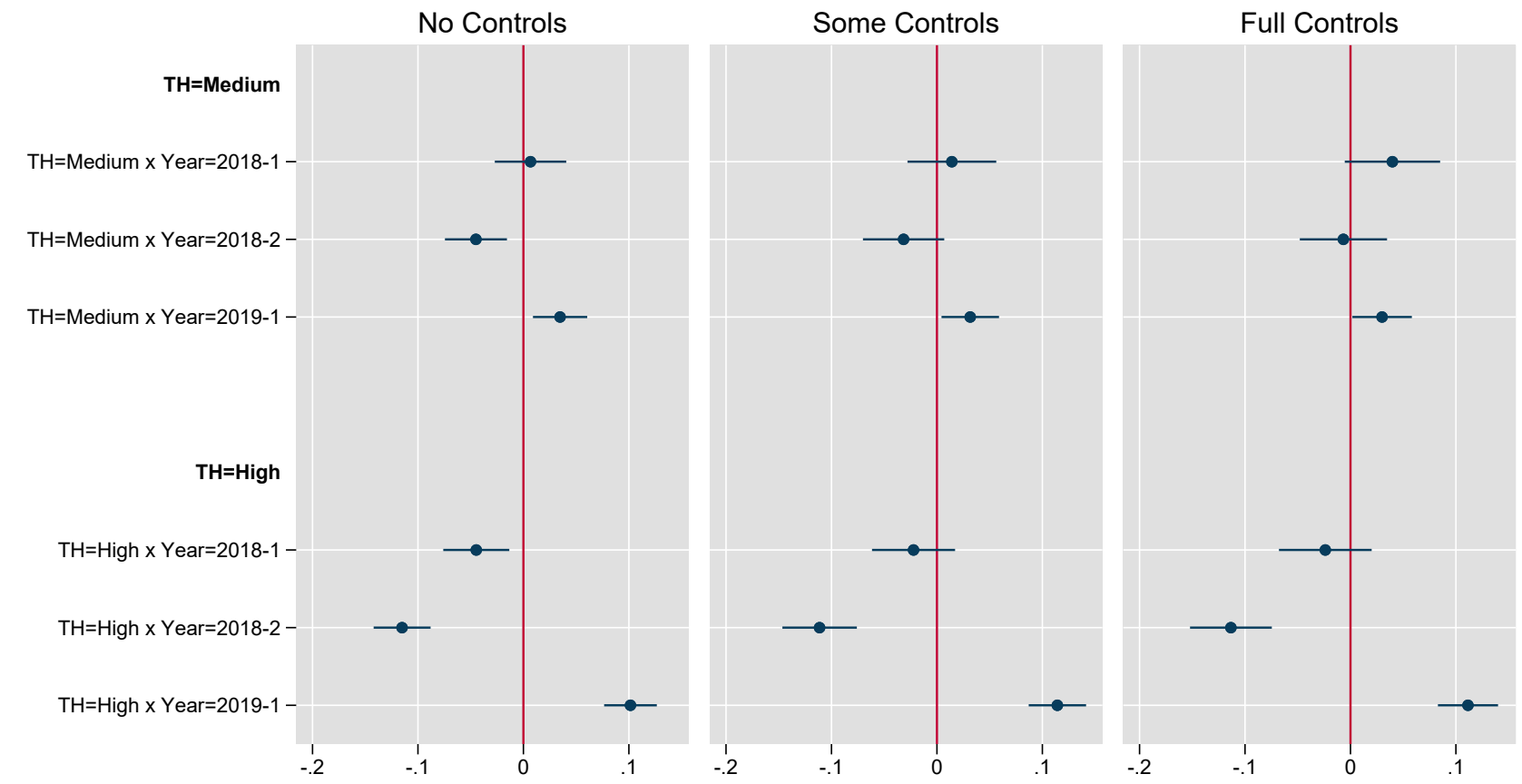


Exhibit B-5.1: HSAs are grouped by their telehealth usage.
Then, average **Clinician Encounters per Beneficiary; Primary Care Physicians** is graphed over Year-Semesters.

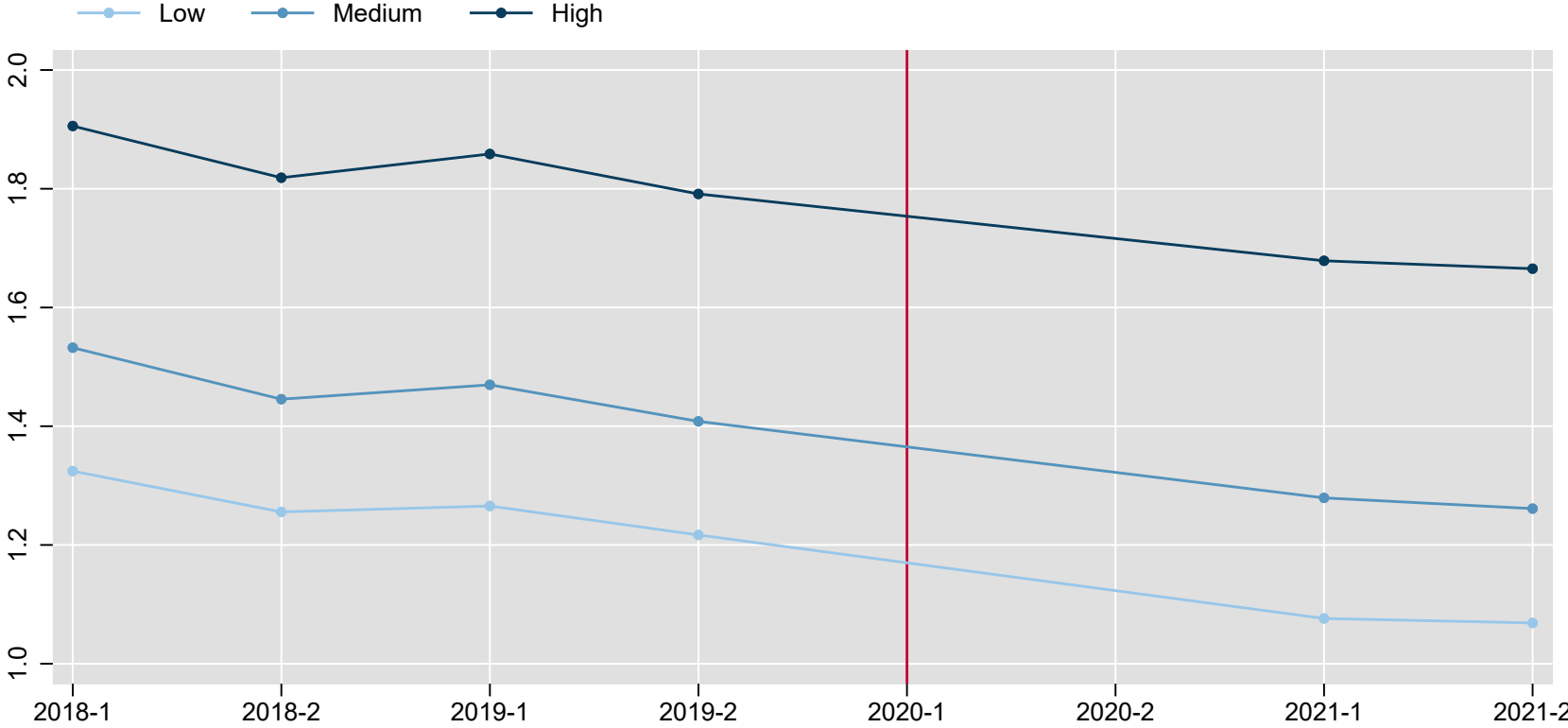


Exhibit B-5.2: Impact Estimates for Clinician Encounters per Beneficiary; Primary Care Physicians.

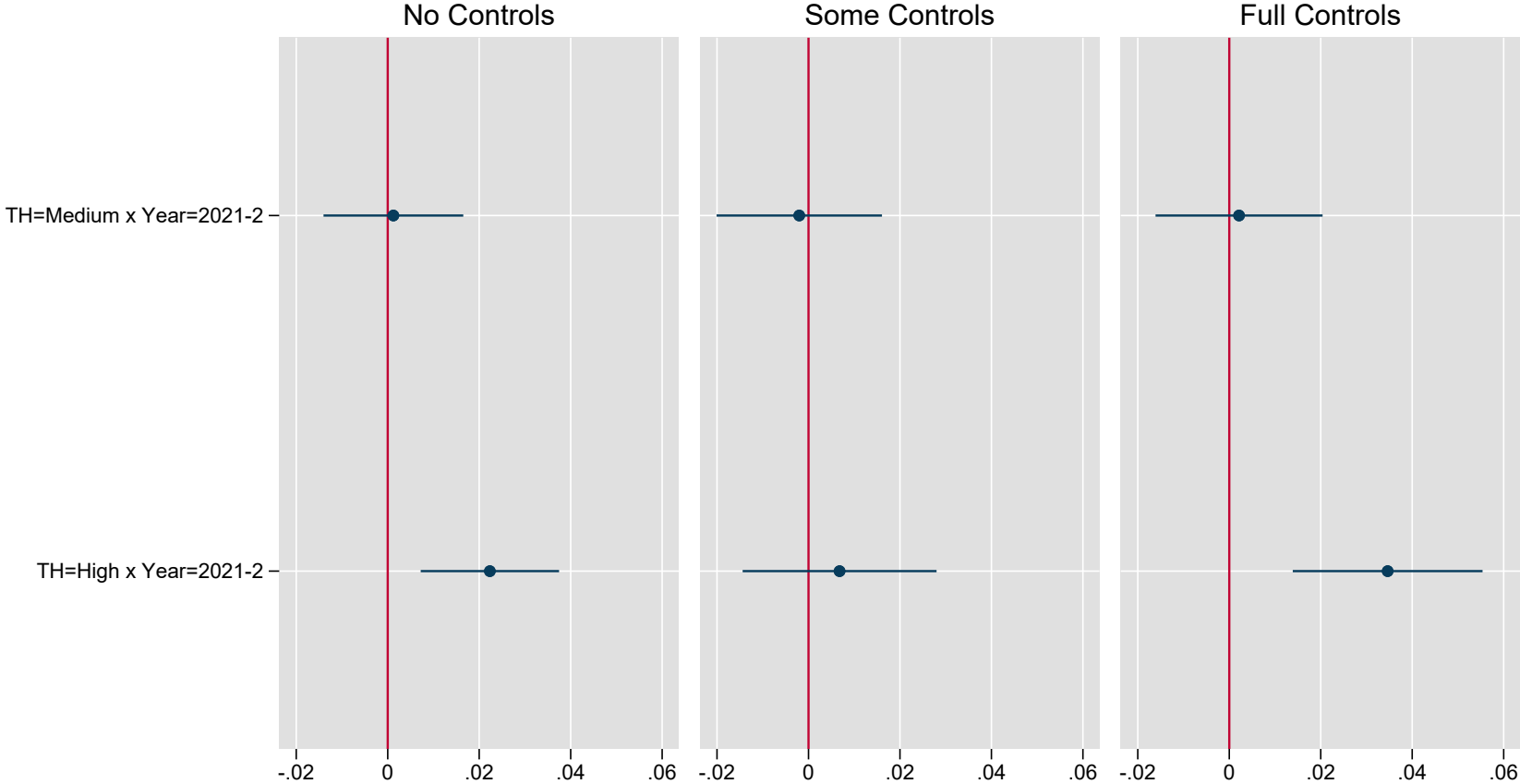


Exhibit B-5.3: Parallel Trends Test for Clinician Encounters per Beneficiary; Primary Care Physicians.

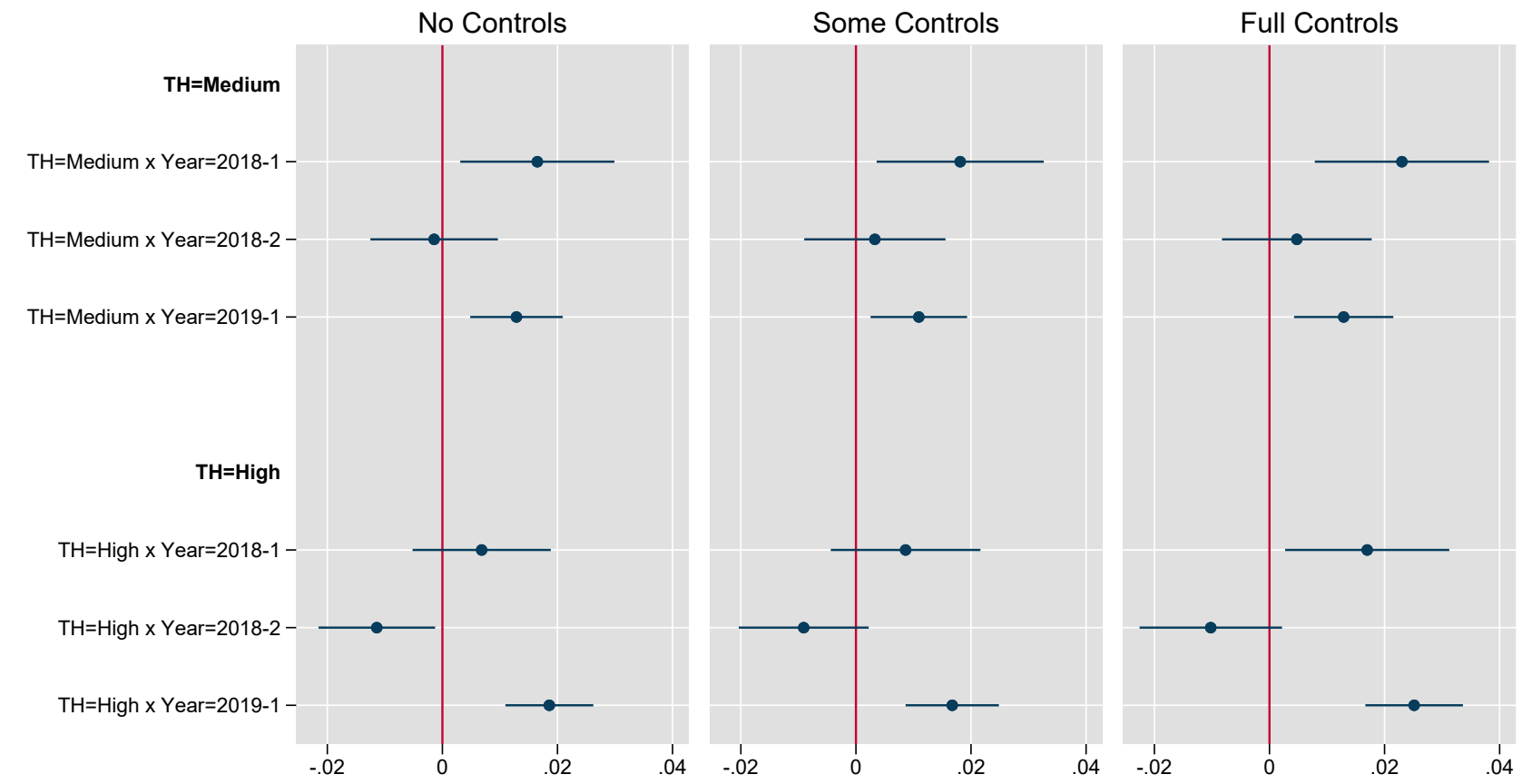


Exhibit B-6.1: HSAs are grouped by their telehealth usage.
Then, average **Clinician Encounters per Beneficiary; Specialists** is graphed over Year-Semesters.

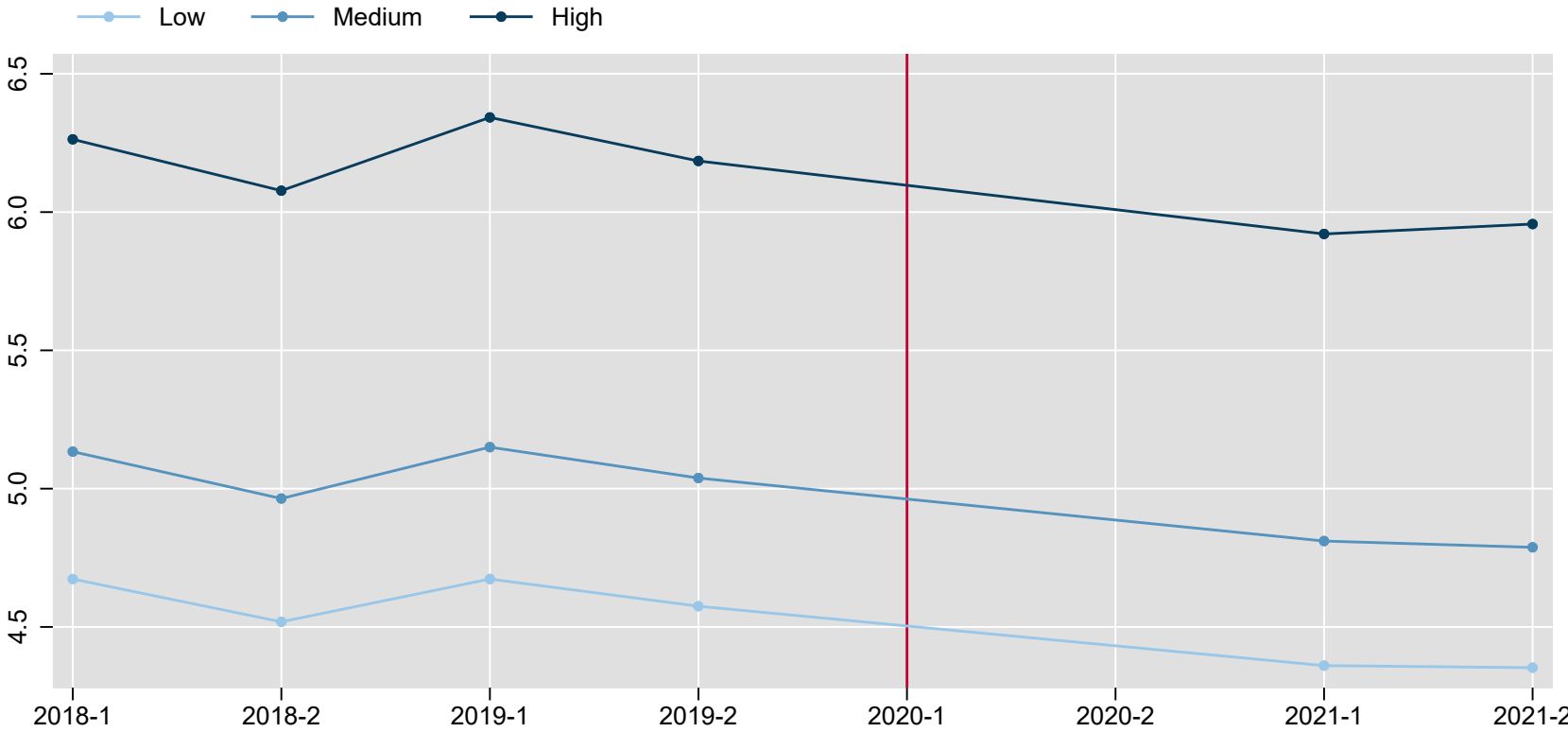


Exhibit B-6.2: Impact Estimates for Clinician Encounters per Beneficiary; Specialists.

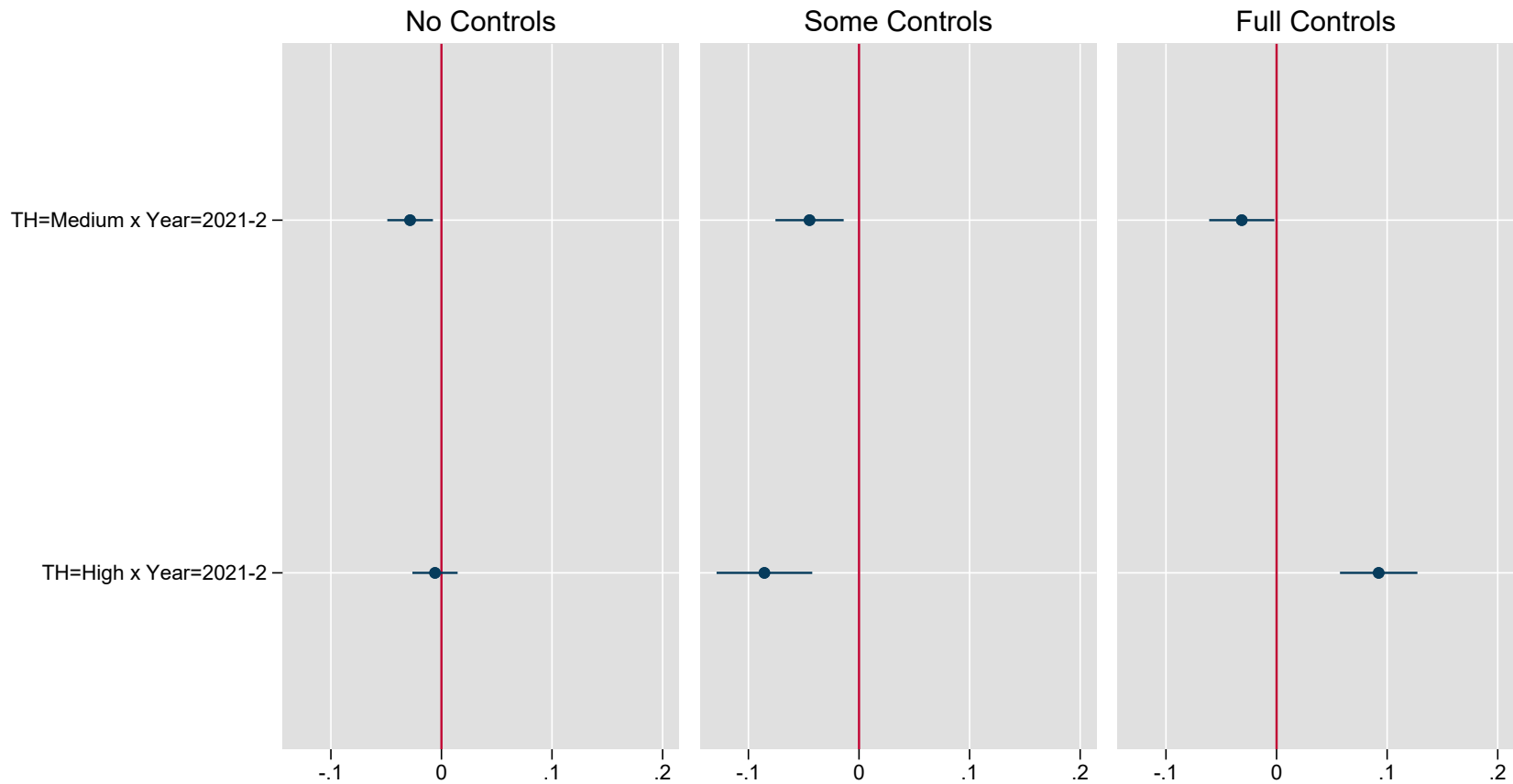


Exhibit B-6.3: Parallel Trends Test for Clinician Encounters per Beneficiary; Specialists.

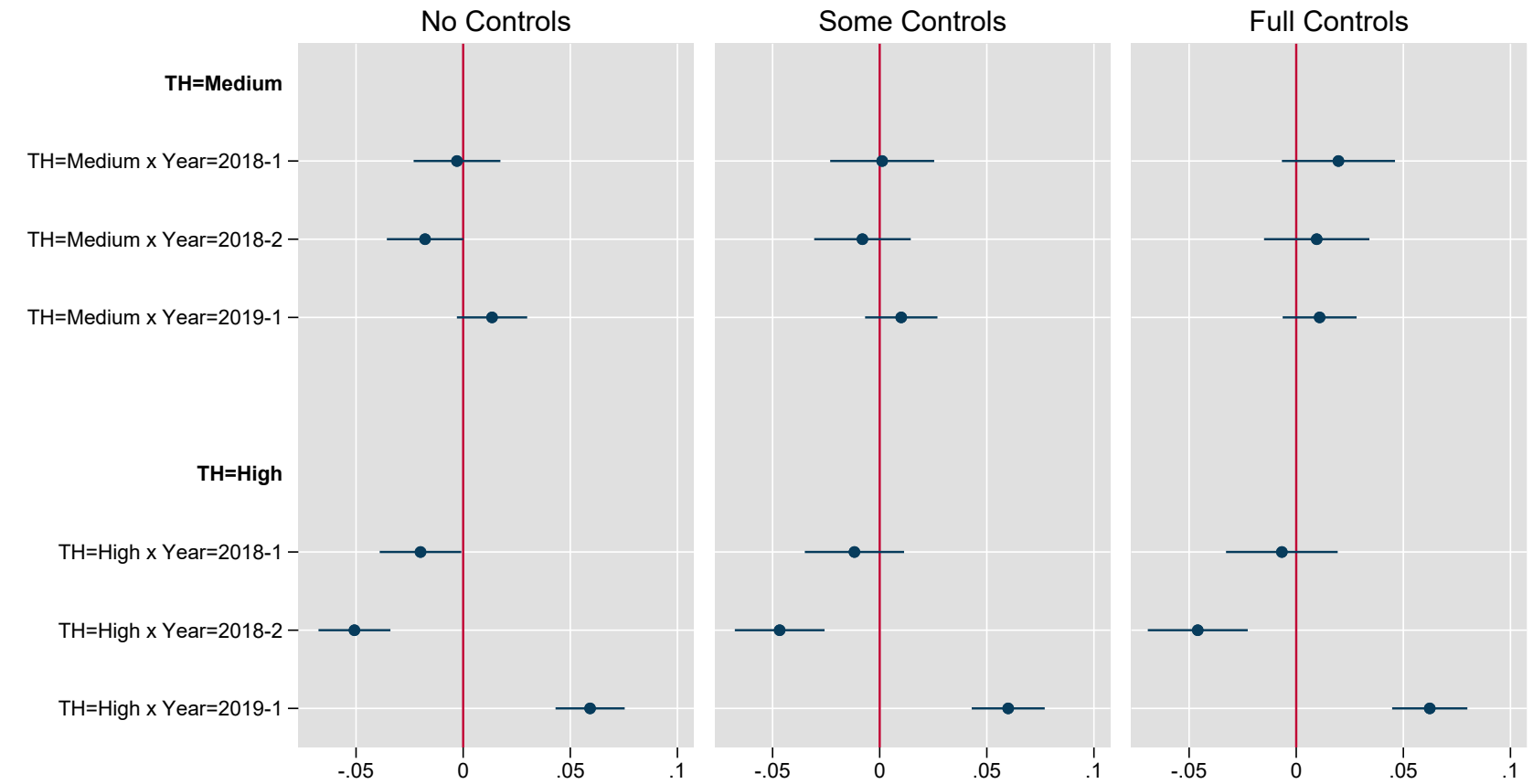


Exhibit B-7.1: HSAs are grouped by their telehealth usage.
Then, average **Clinician Encounters per Beneficiary; APRNs/PAs** is graphed over Year-Semesters.

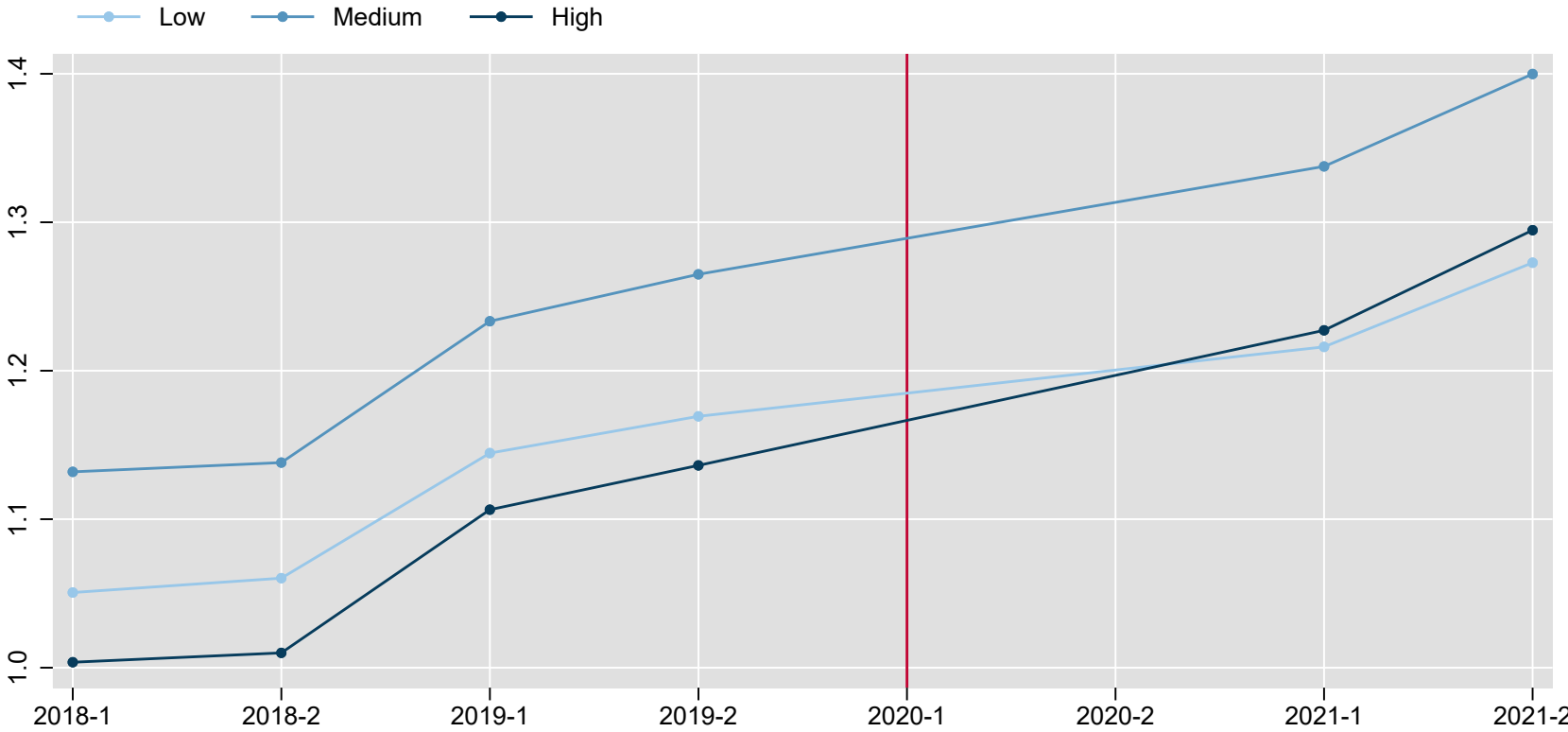


Exhibit B-7.2: Impact Estimates for Clinician Encounters per Beneficiary; APRNs/PAs.

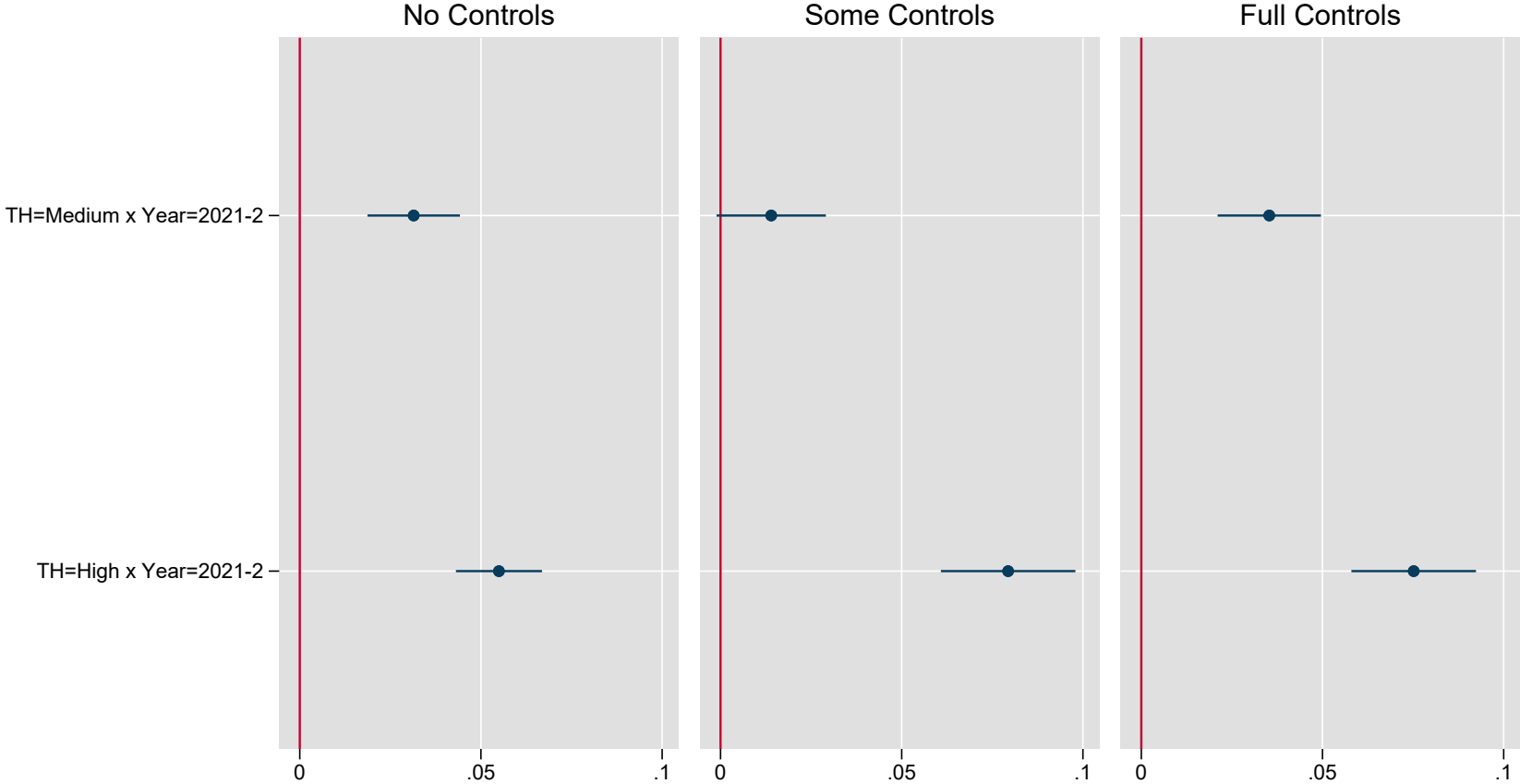


Exhibit B-7.3: Parallel Trends Test for Clinician Encounters per Beneficiary; APRNs/PAs.

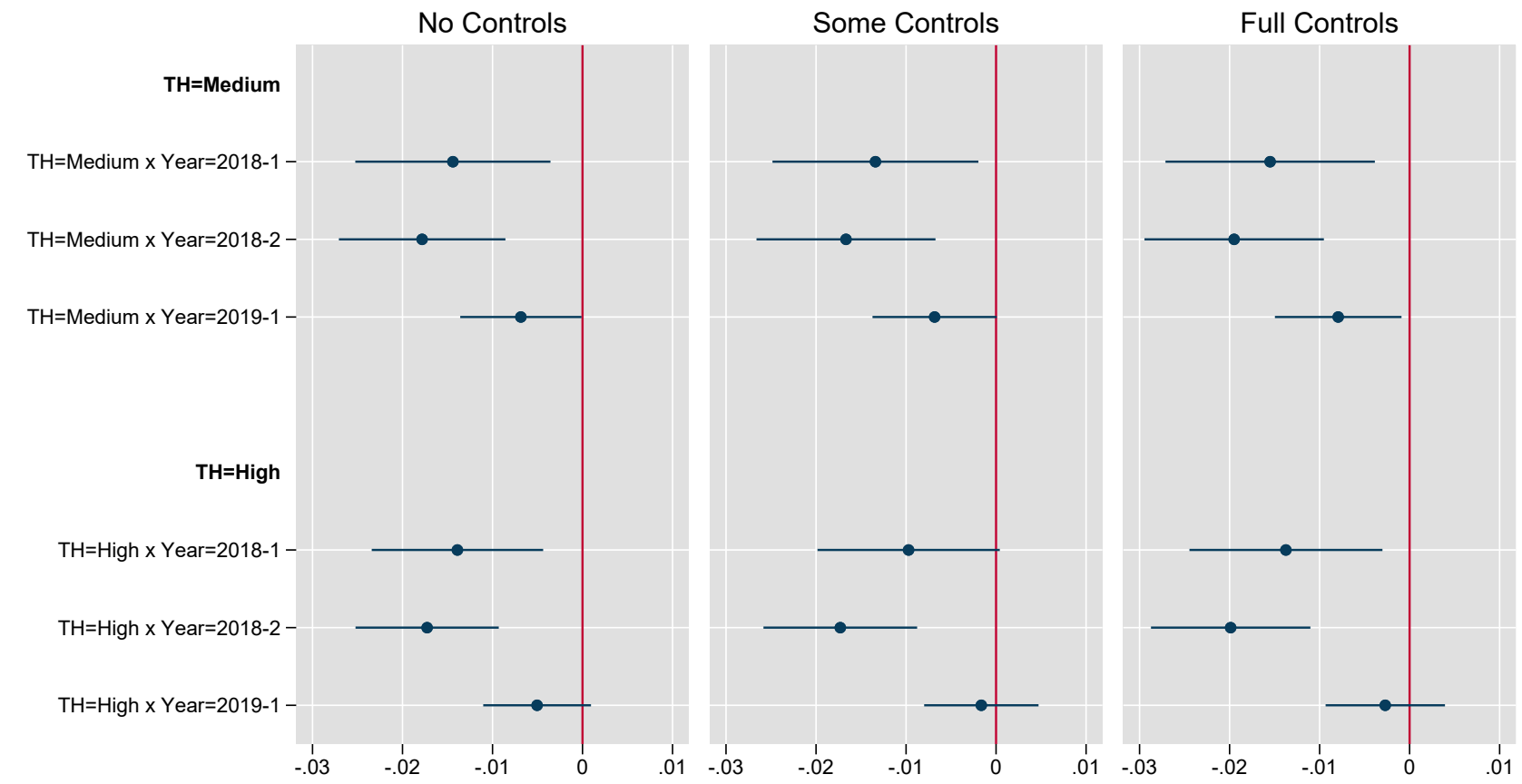


Exhibit B-8.1: HSAs are grouped by their telehealth usage. Then, average **Clinician Encounters per Beneficiary; Other Practitioners** is graphed over Year-Semesters.

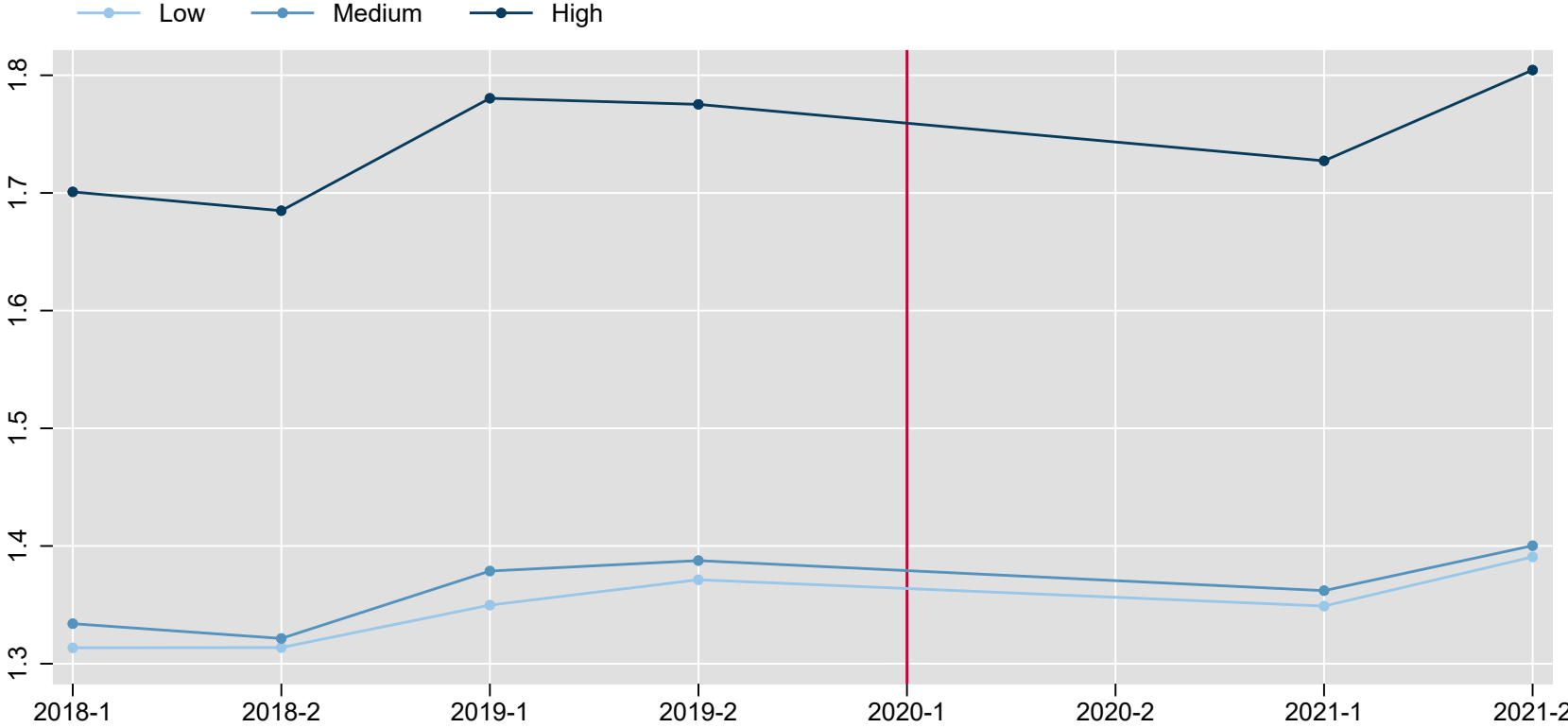


Exhibit B-8.2: Impact Estimates for Clinician Encounters per Beneficiary; Other Practitioners.

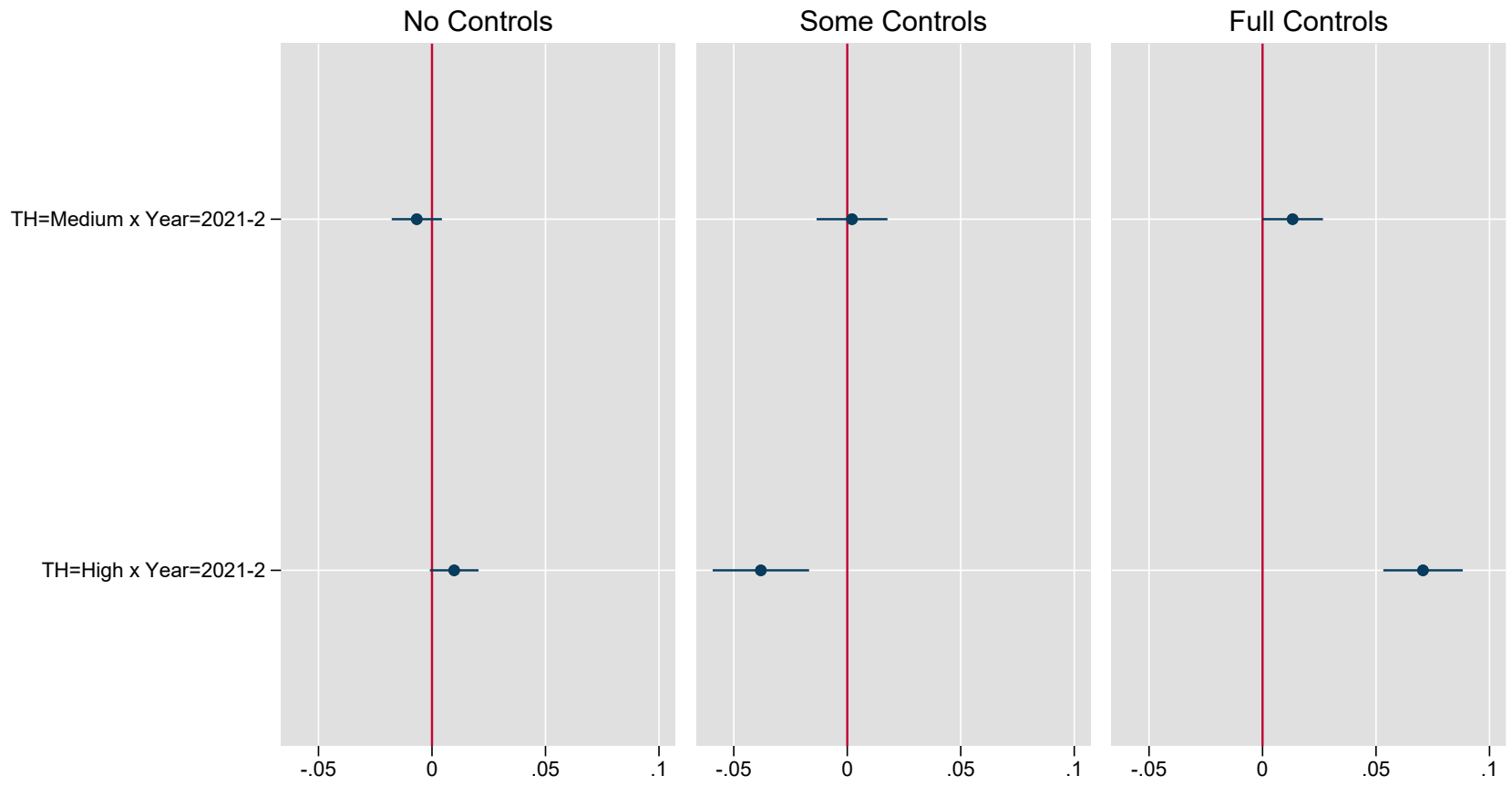


Exhibit B-8.3: Parallel Trends Test for Clinician Encounters per Beneficiary; Other Practitioners.

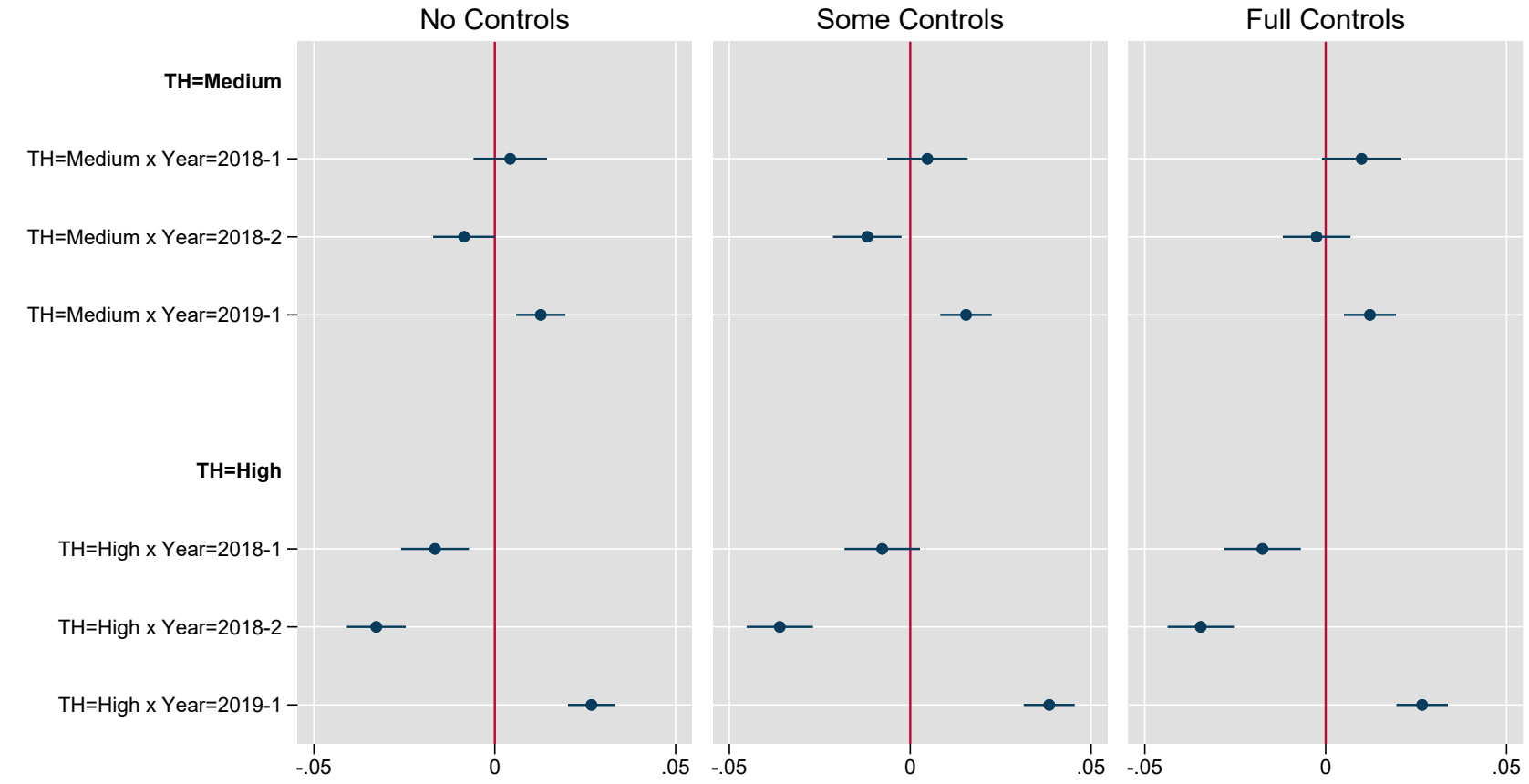


Exhibit B-9.1: HSAs are grouped by their telehealth usage.
Then, average **Clinician Encounters per Beneficiary; Hospitalists** is graphed over Year-Semesters.

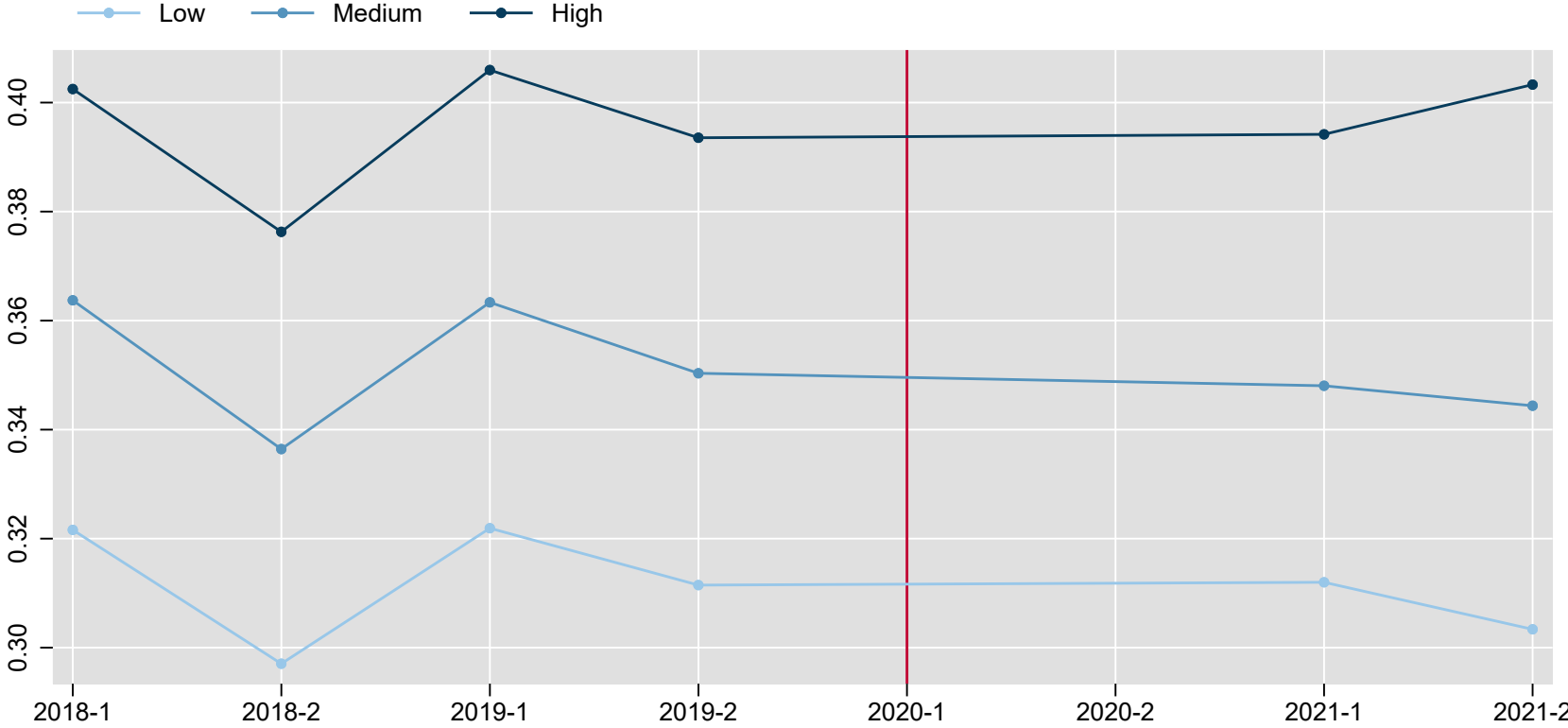


Exhibit B-9.2: Impact Estimates for Clinician Encounters per Beneficiary; Hospitalists.

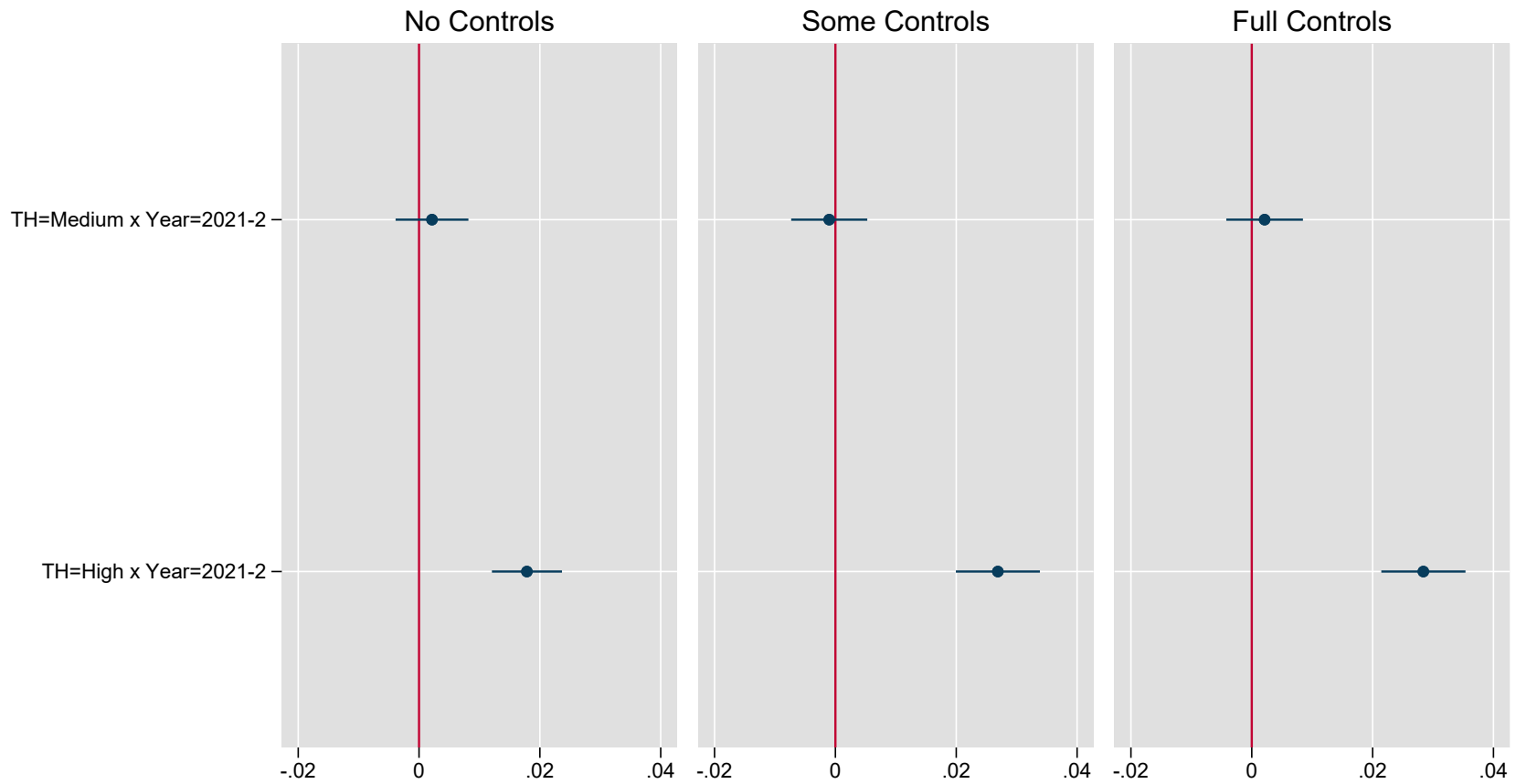


Exhibit B-9.3: Parallel Trends Test for Clinician Encounters per Beneficiary; Hospitalists.

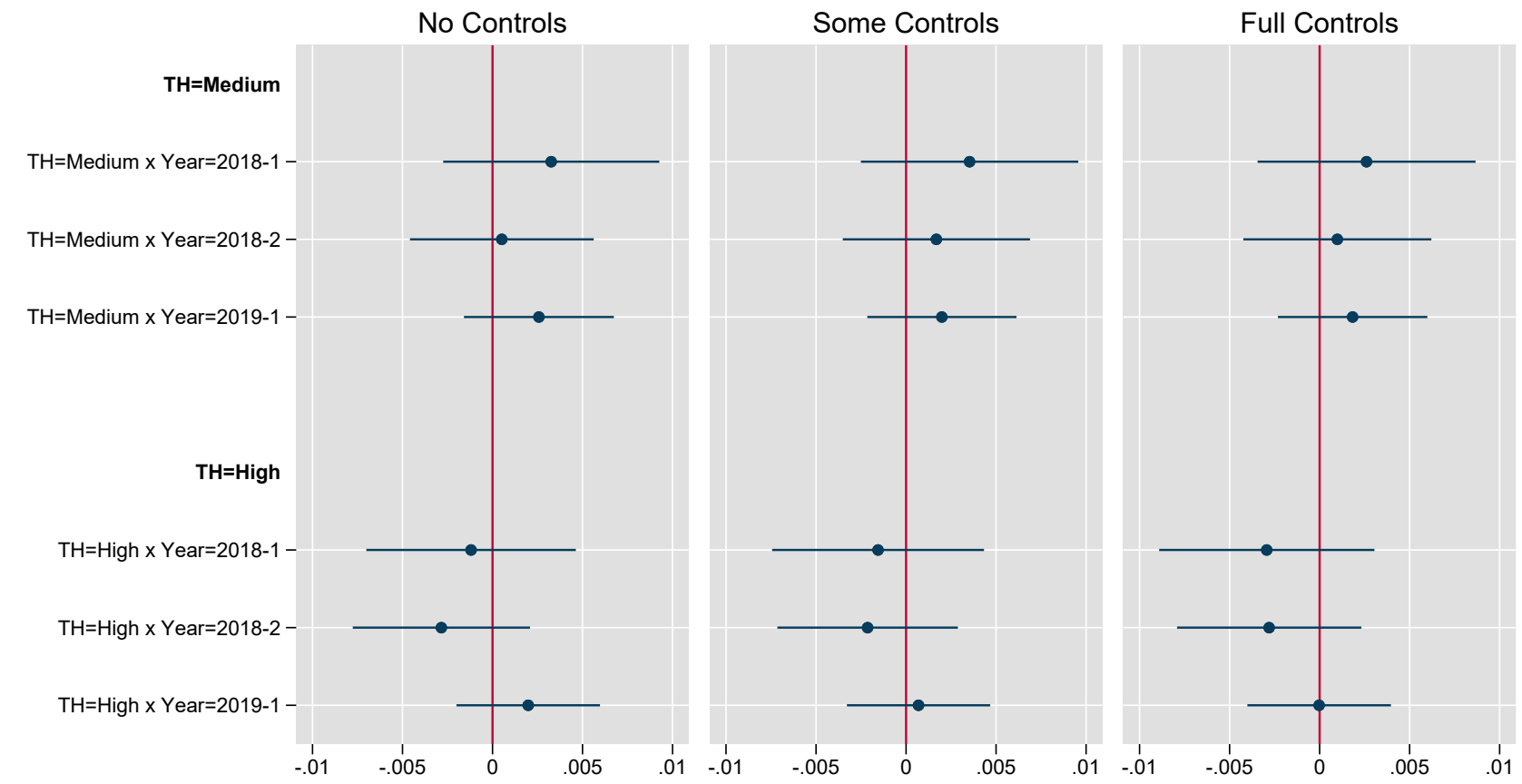


Exhibit B-10.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary** is graphed over Year-Semesters.

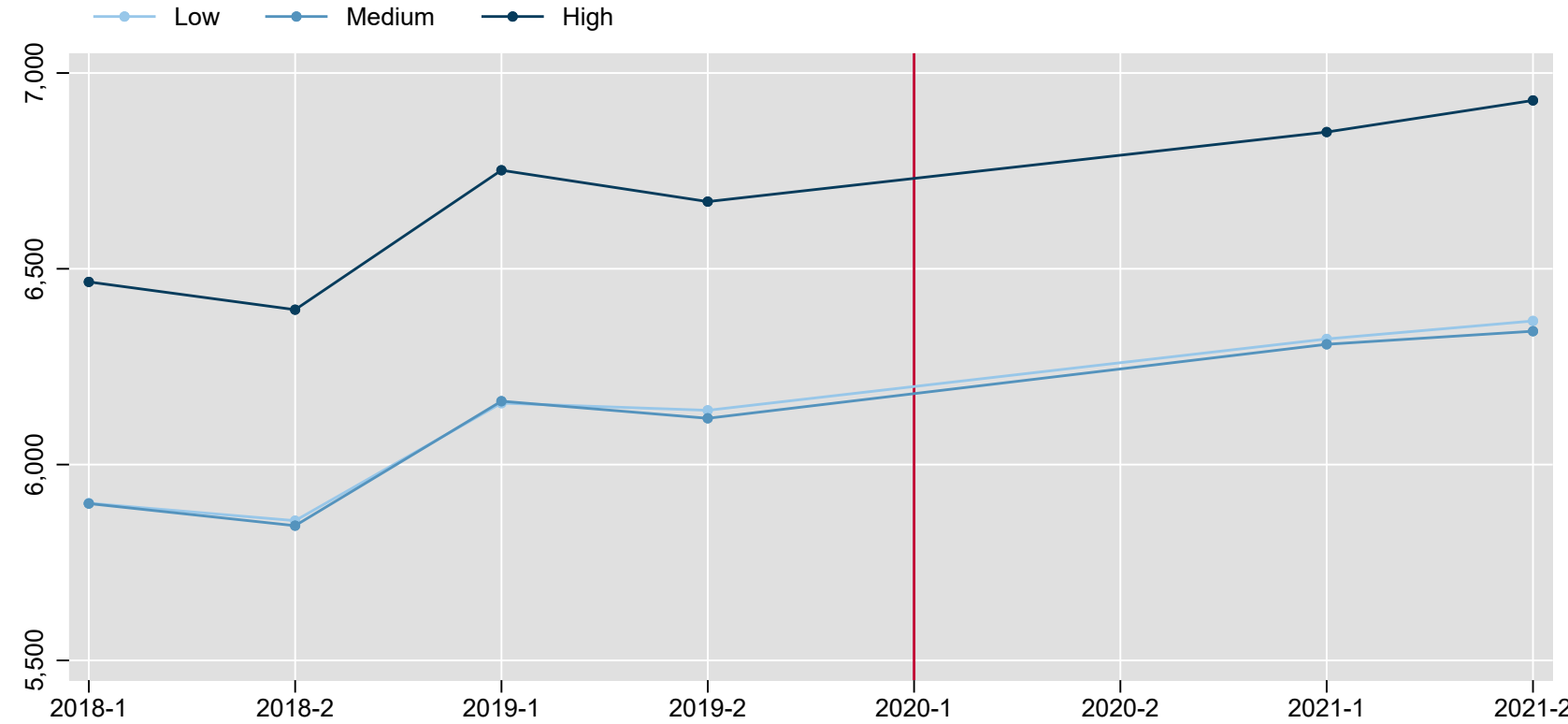


Exhibit B-10.2: Impact Estimates for Total Cost of Care per Beneficiary.

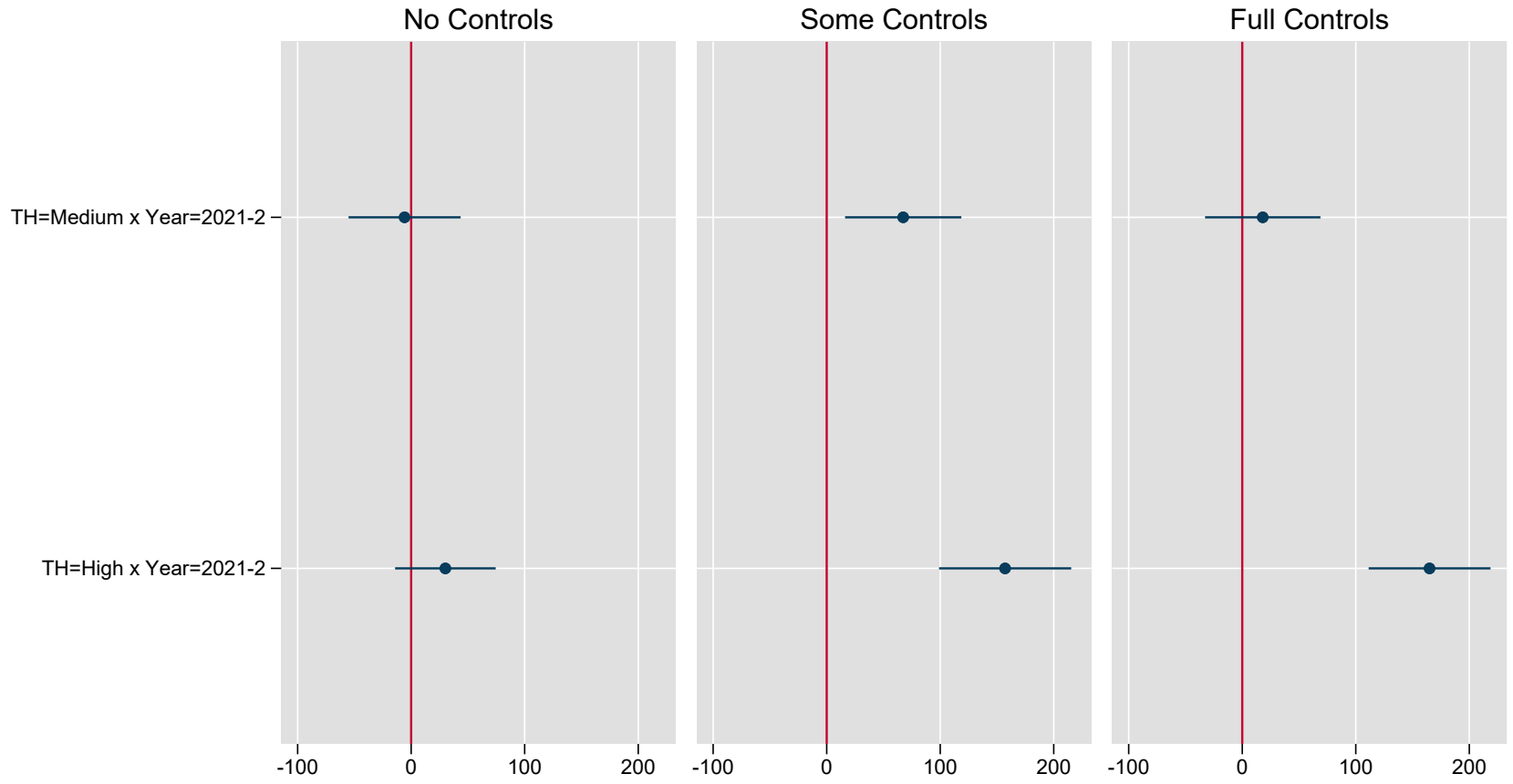


Exhibit B-10.3: Parallel Trends Test for Total Cost of Care per Beneficiary.

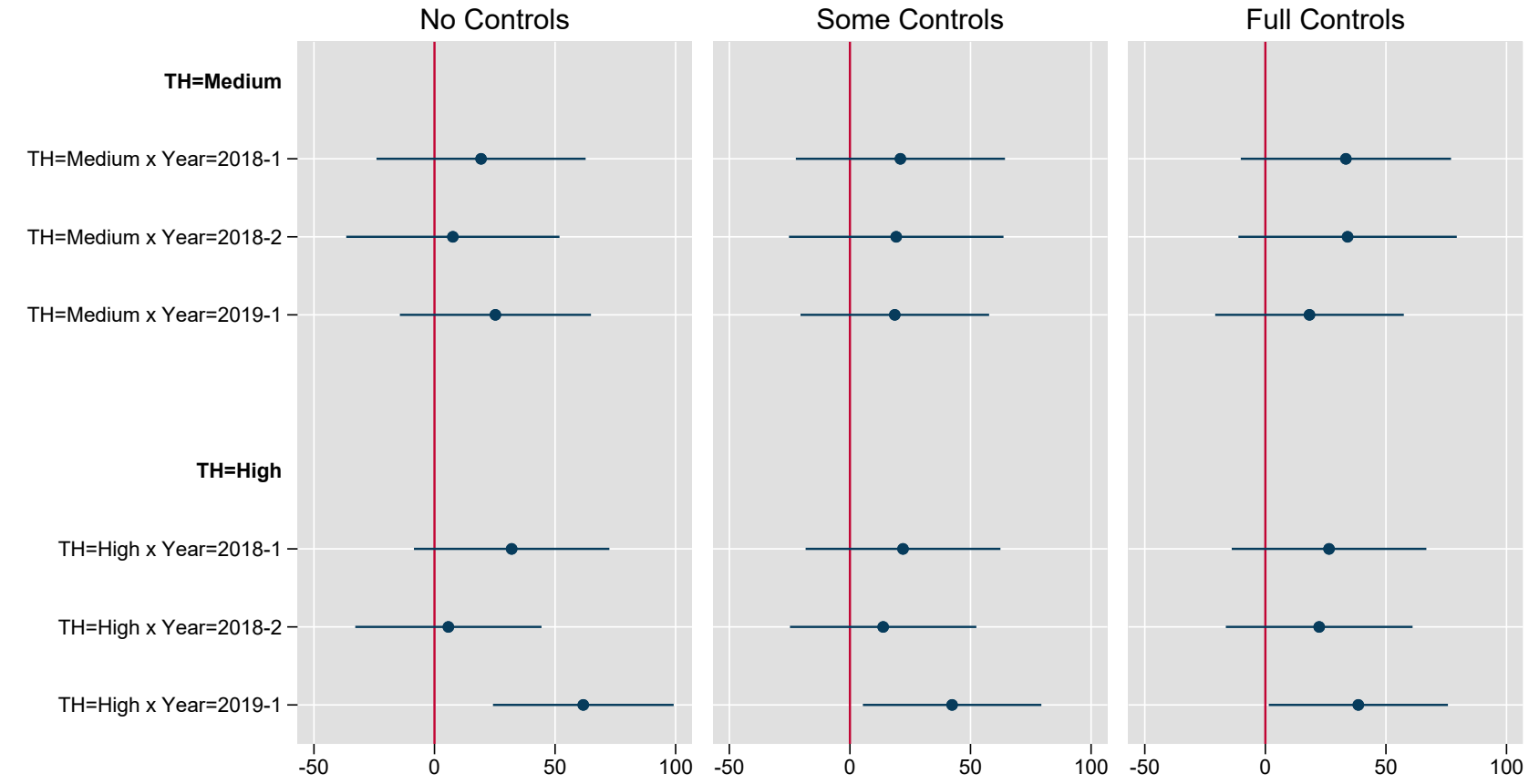


Exhibit B-11.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Inpatient** is graphed over Year-Semesters.

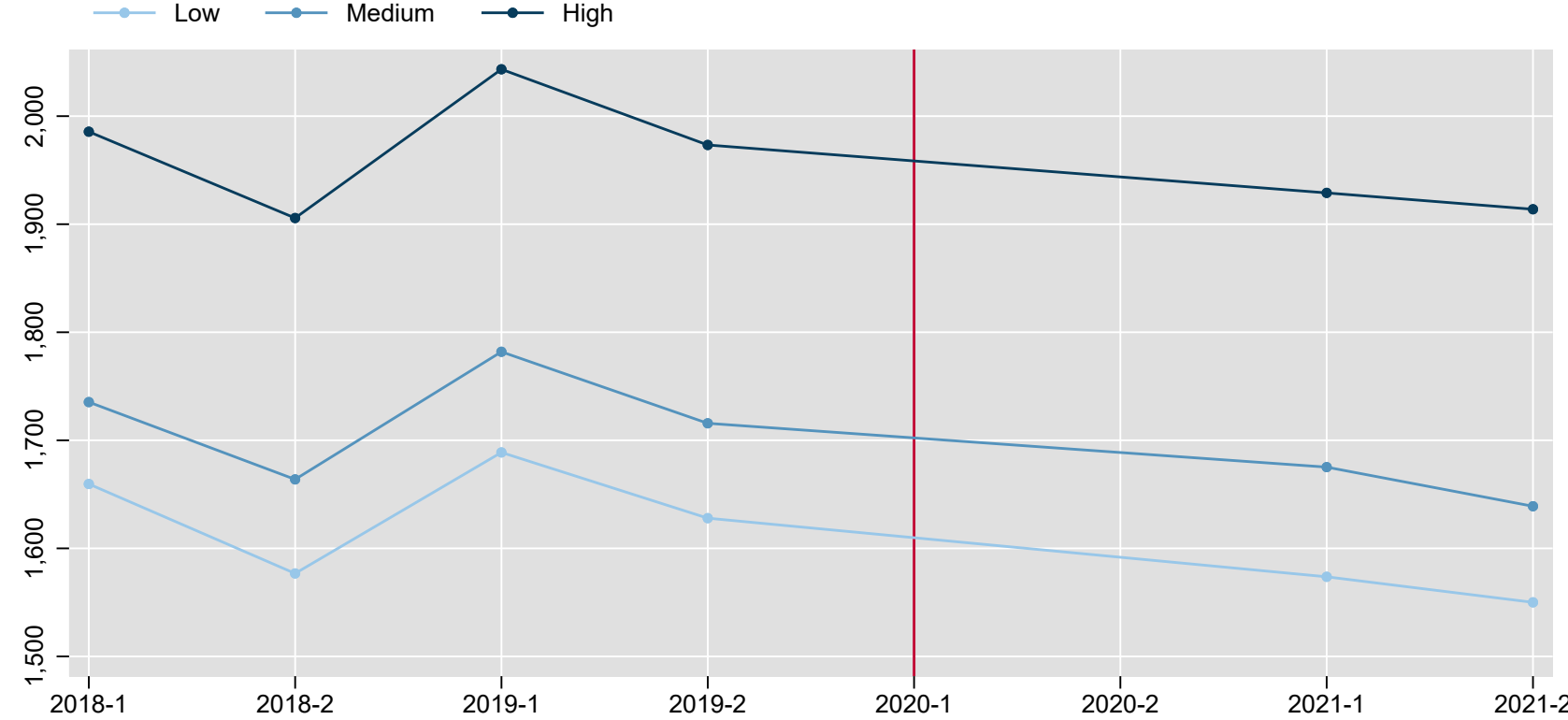


Exhibit B-11.2: Impact Estimates for Total Cost of Care per Beneficiary; Inpatient.

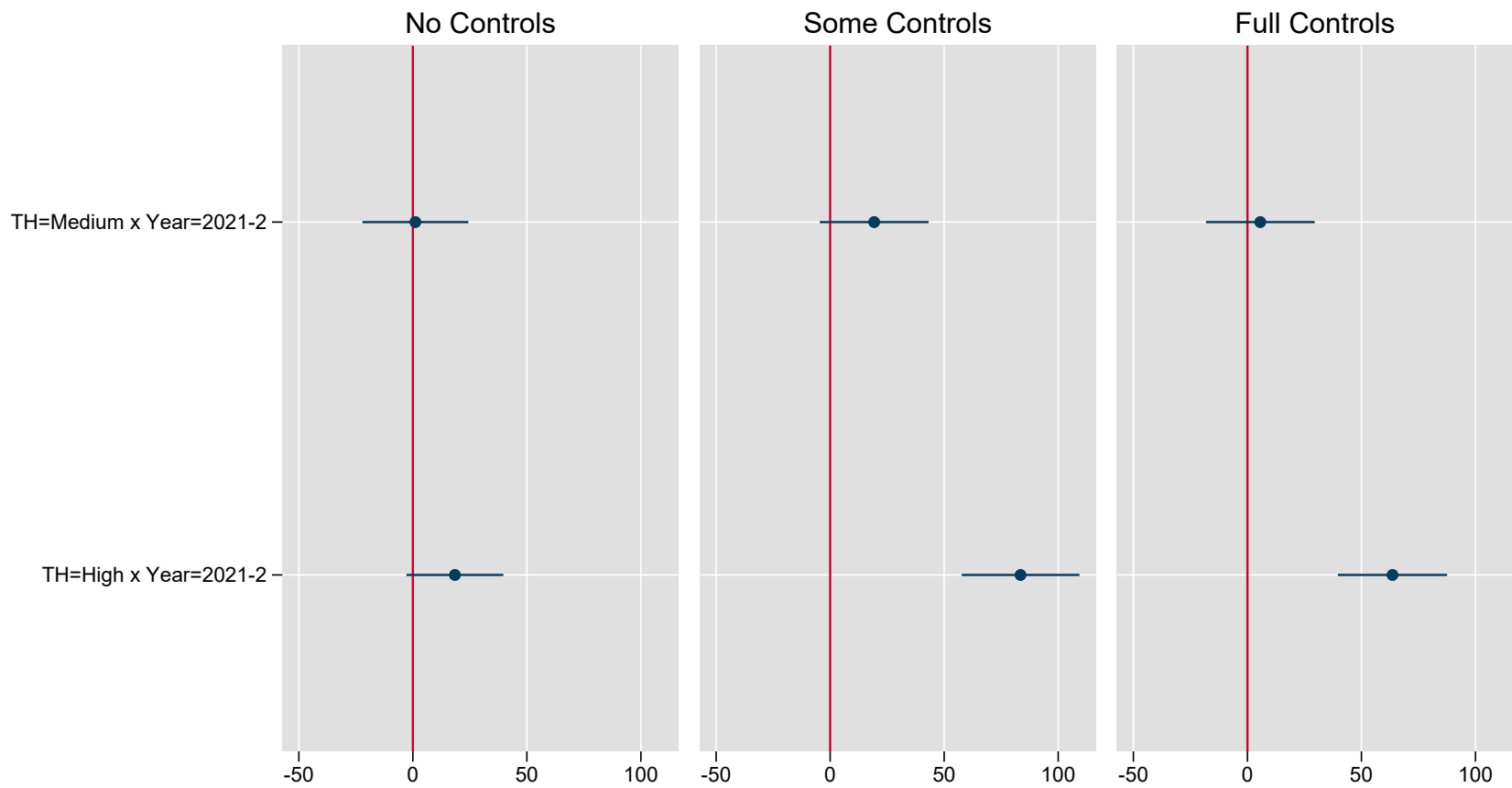


Exhibit B-11.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Inpatient.

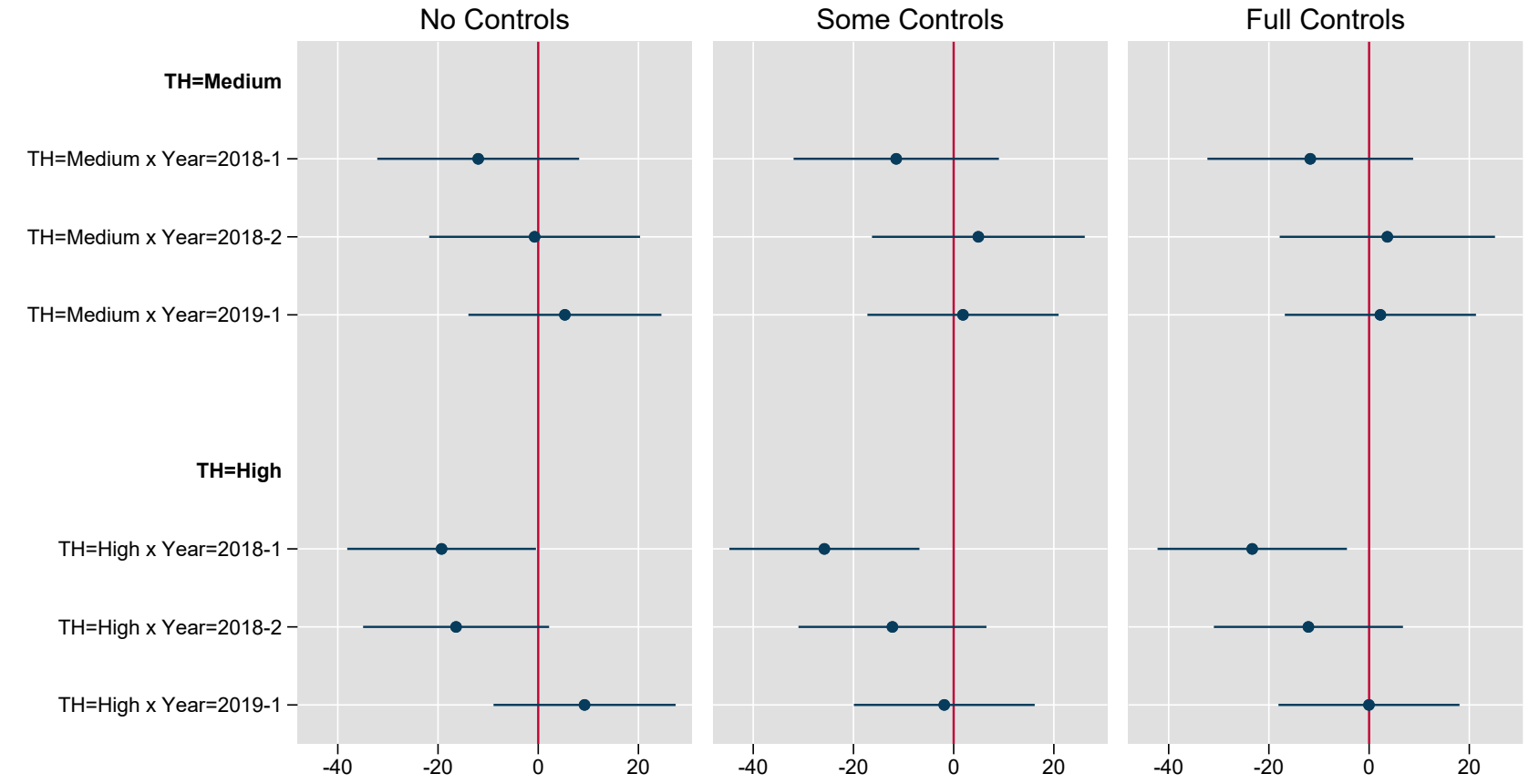


Exhibit B-12.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Outpatient** is graphed over Year-Semesters.

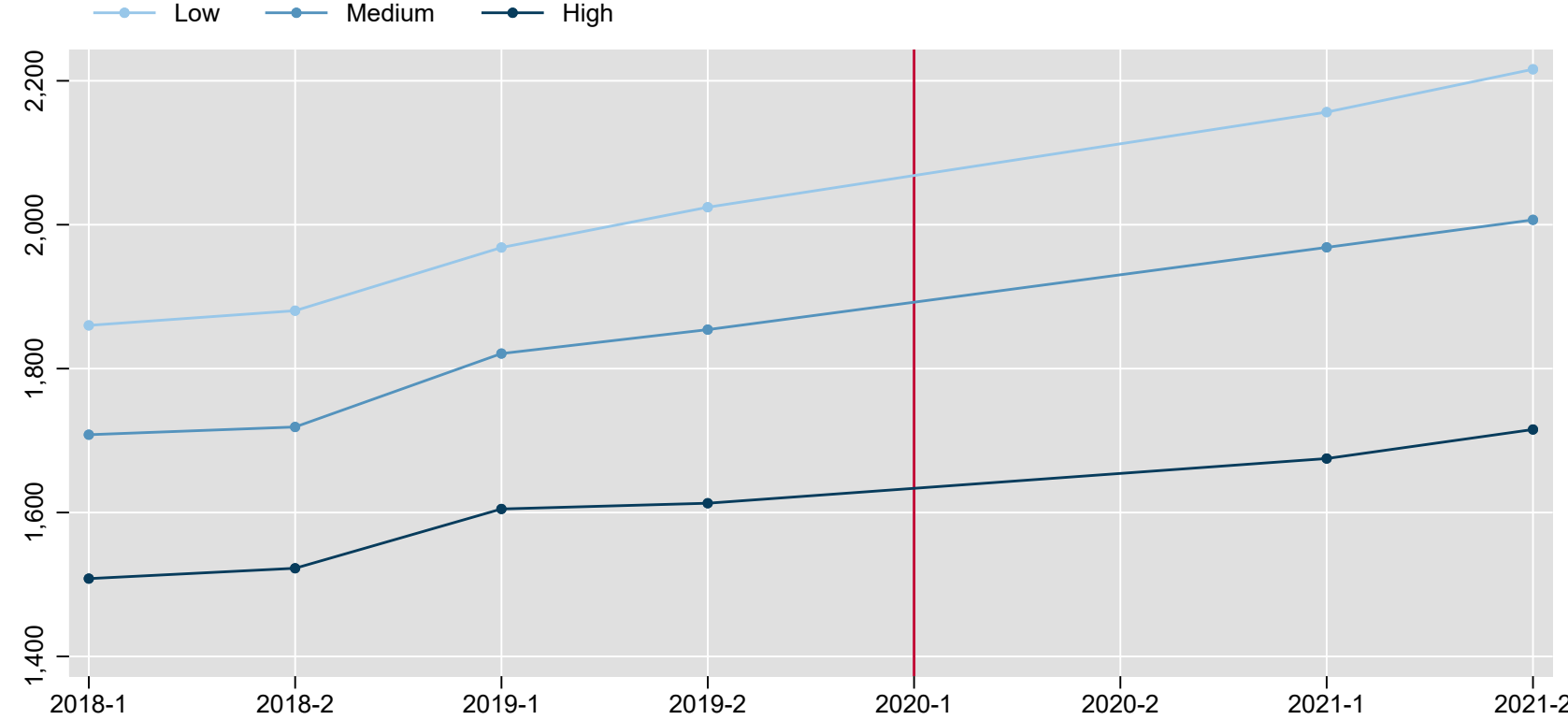


Exhibit B-12.2: Impact Estimates for Total Cost of Care per Beneficiary; Outpatient.

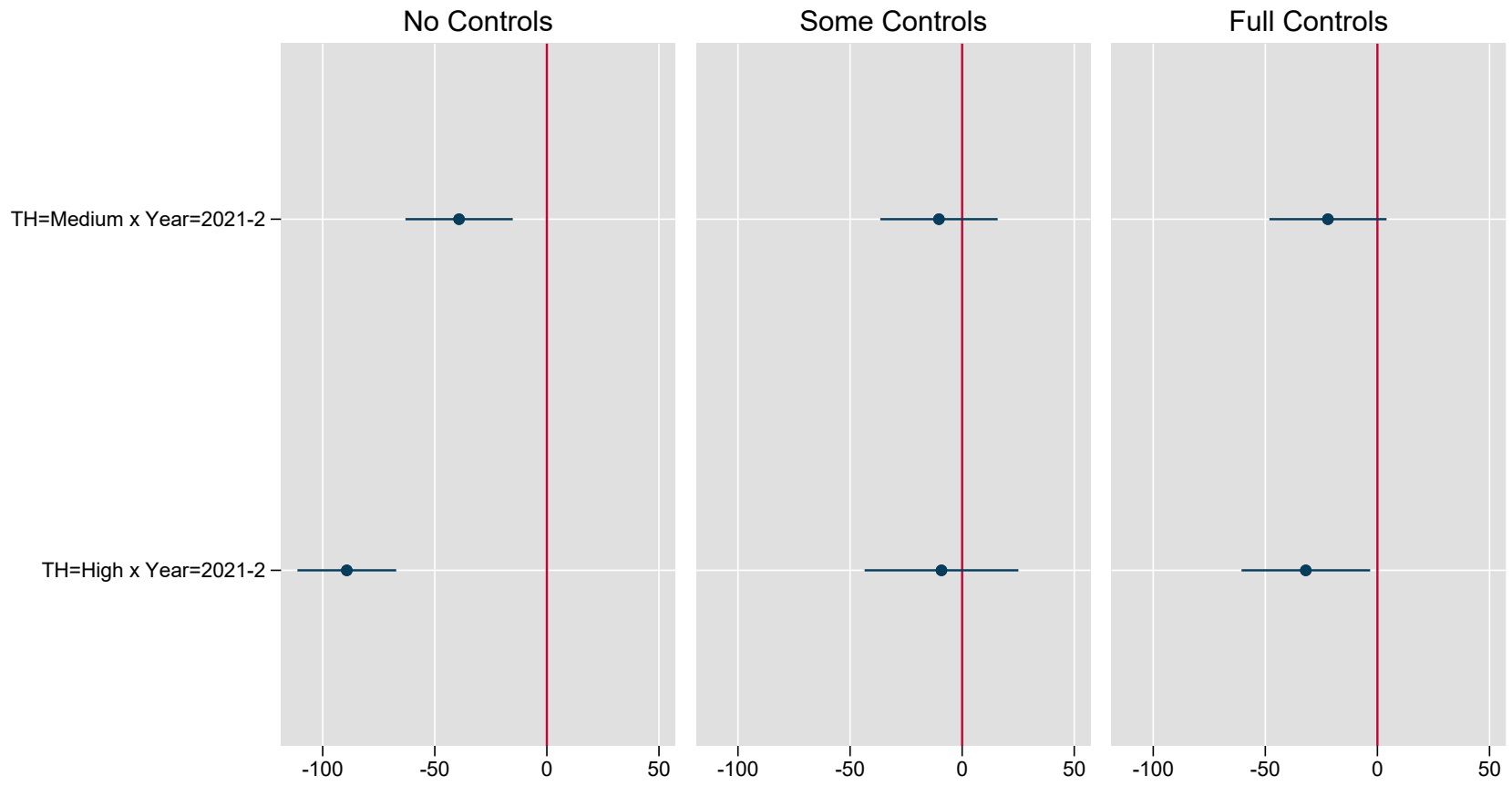


Exhibit B-12.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Outpatient.

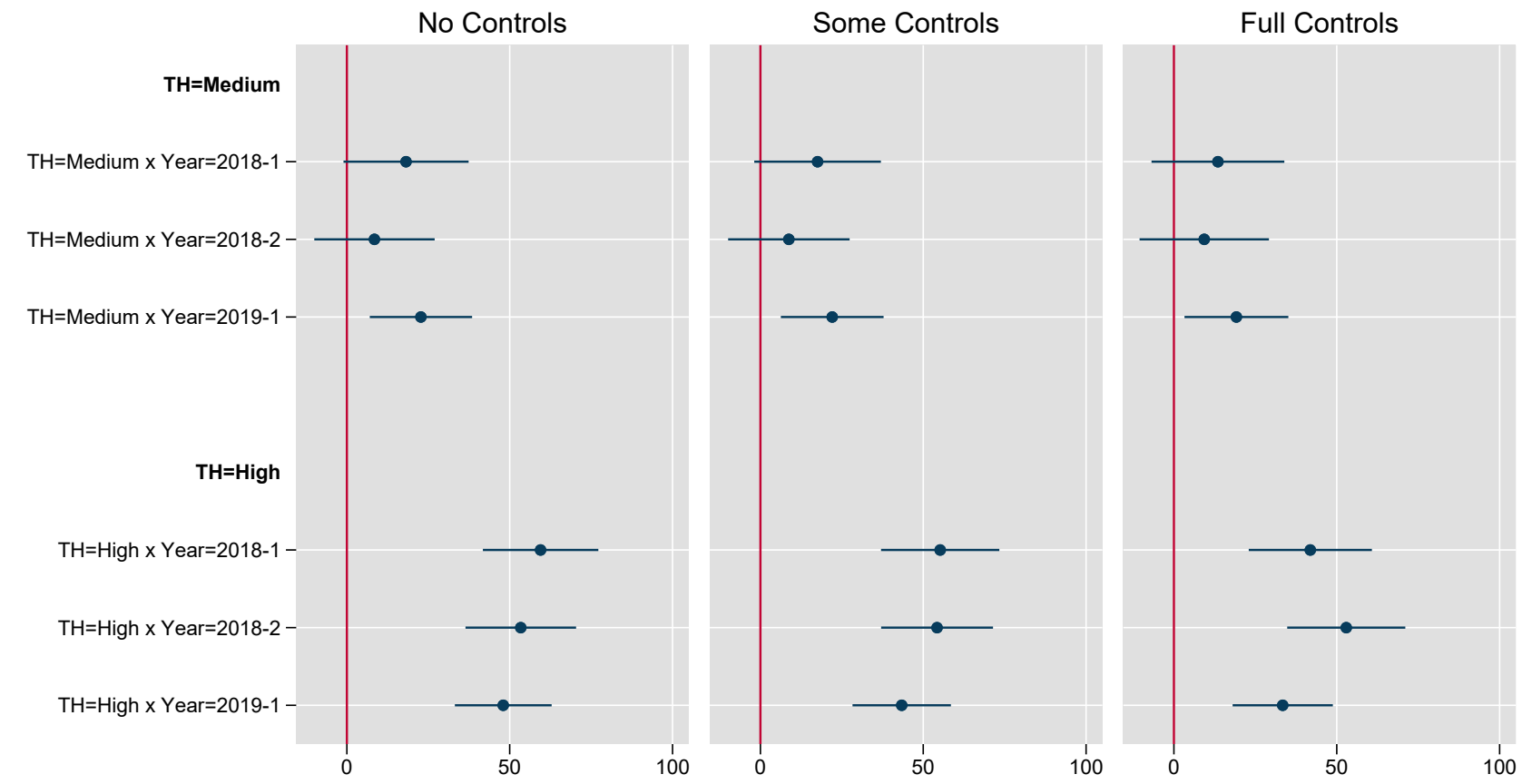


Exhibit B-13.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Skilled Nursing Facility** is graphed over Year-Semesters.

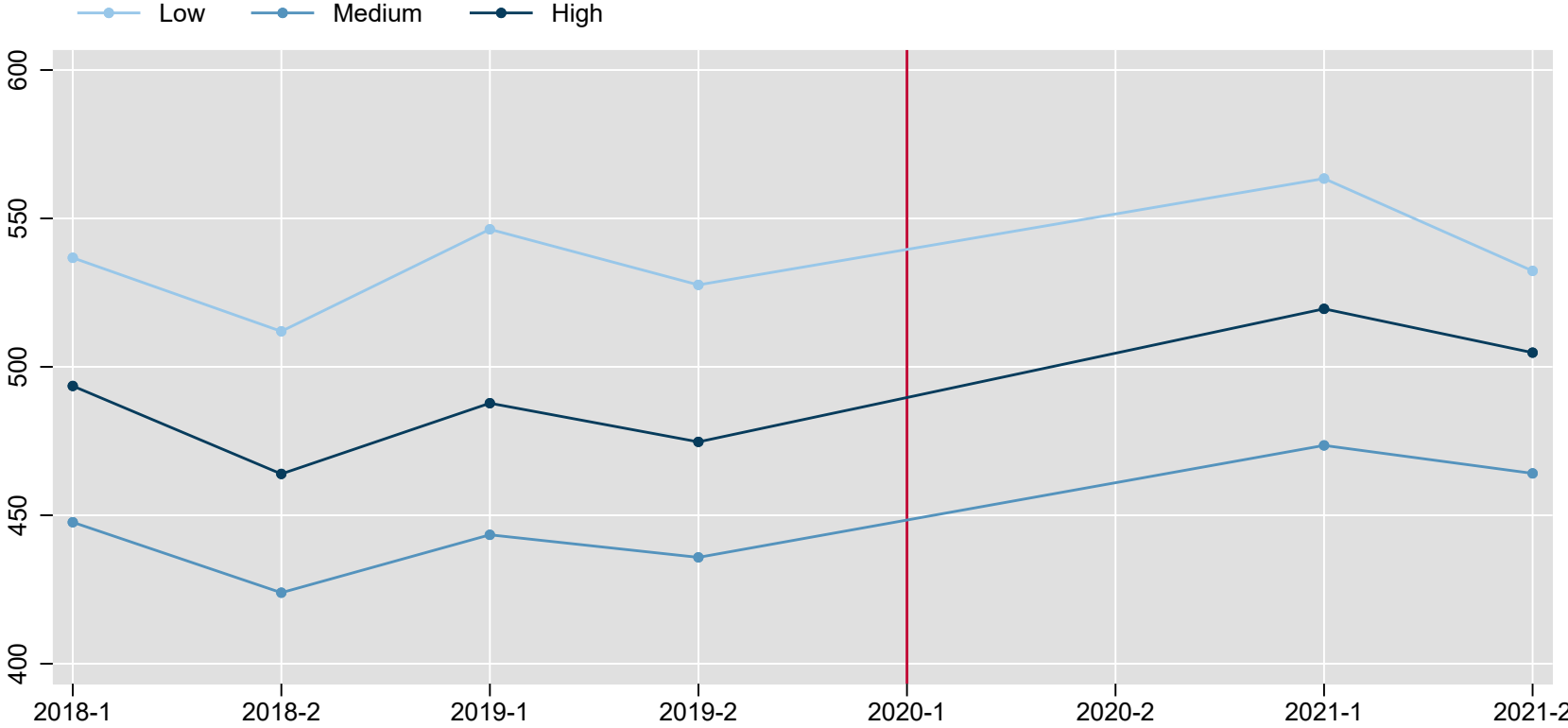


Exhibit B-13.2: Impact Estimates for Total Cost of Care per Beneficiary; Skilled Nursing Facility.

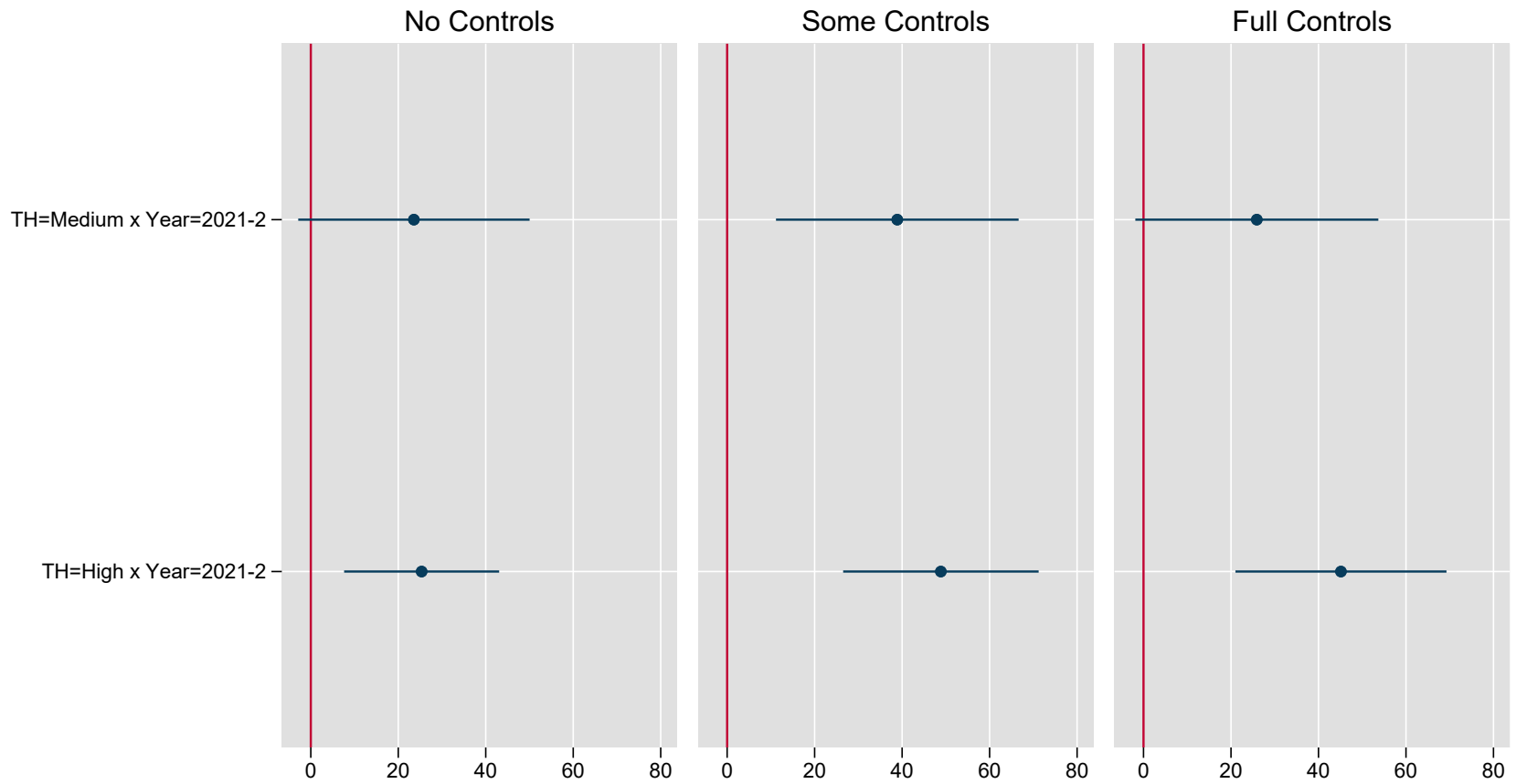


Exhibit B-13.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Skilled Nursing Facility.

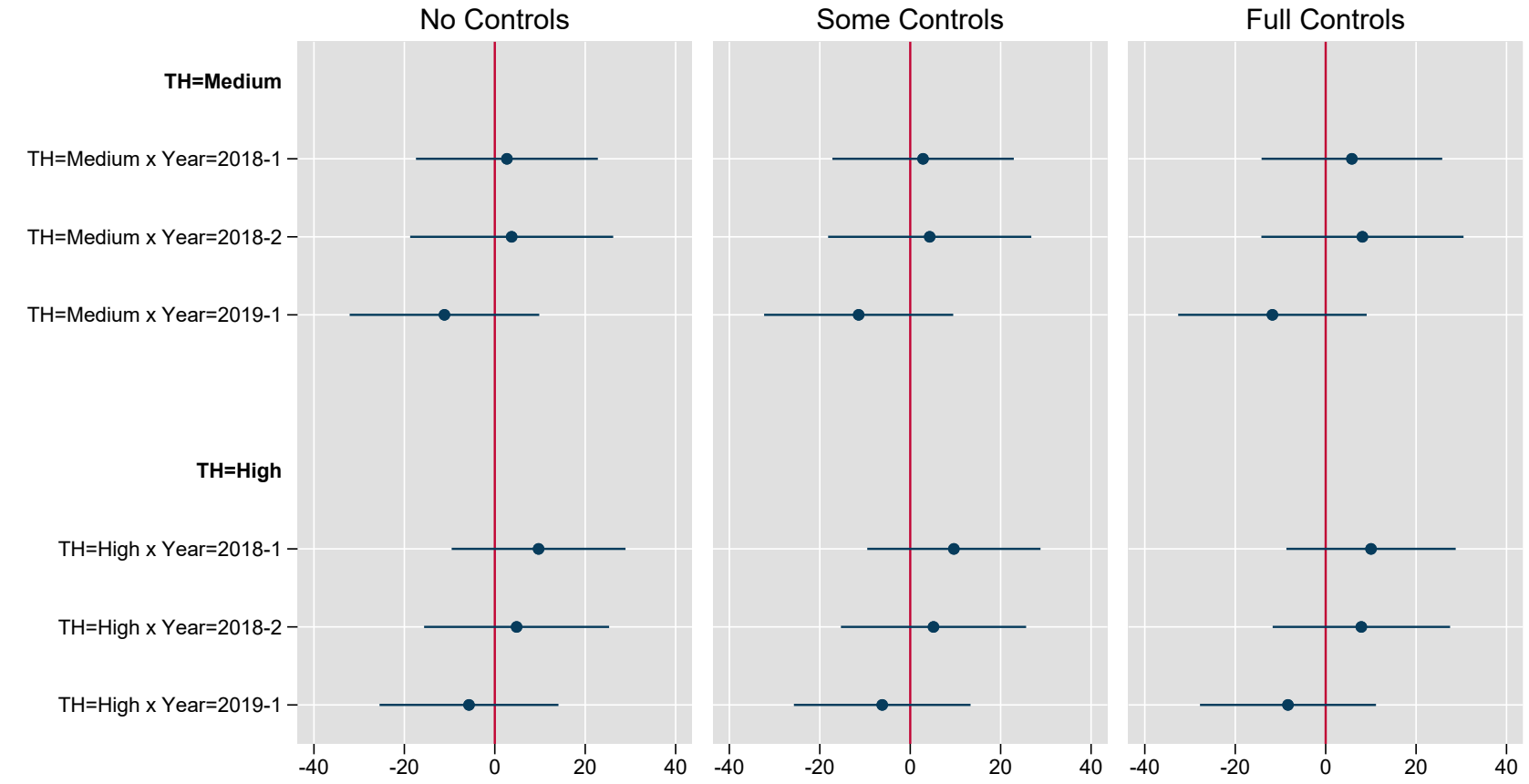


Exhibit B-14.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Home Health** is graphed over Year-Semesters.

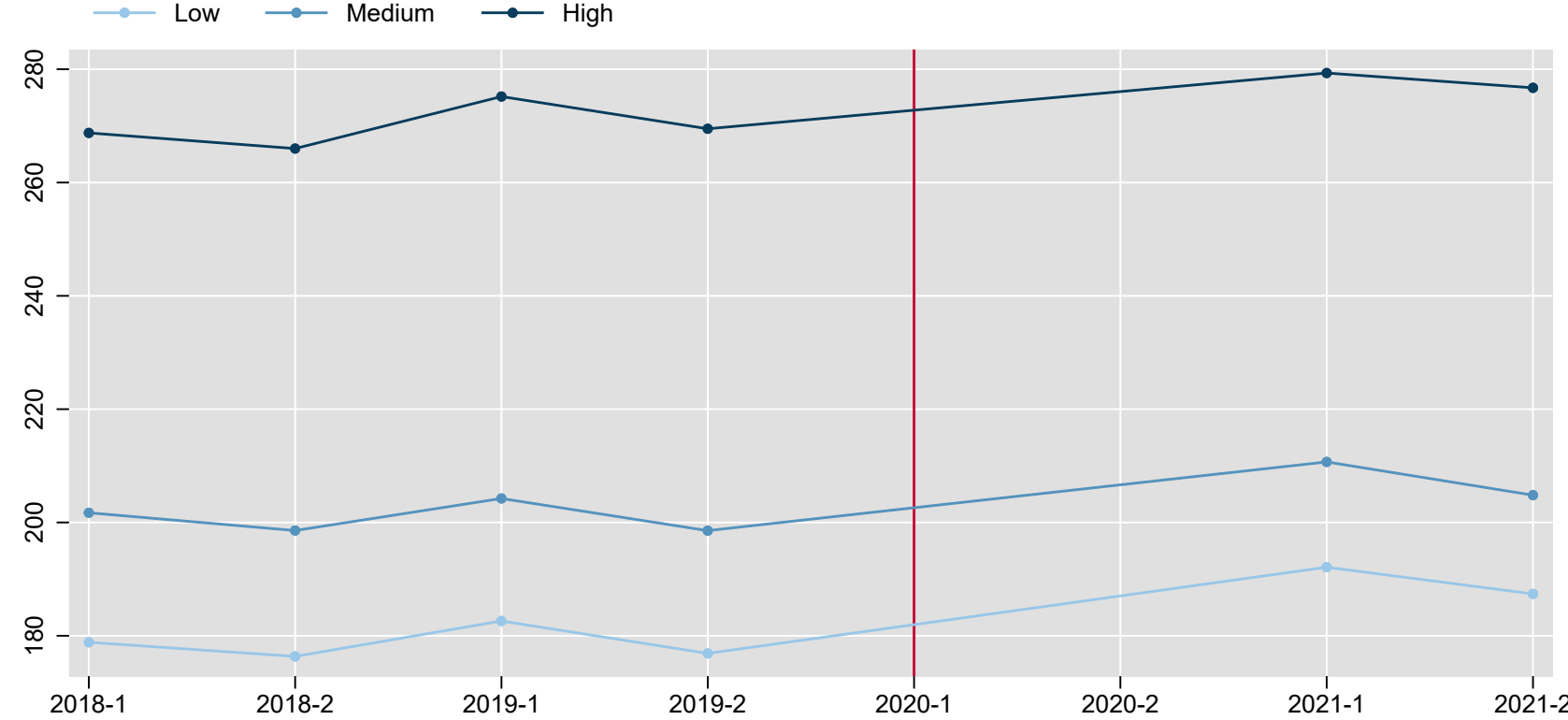


Exhibit B-14.2: Impact Estimates for Total Cost of Care per Beneficiary; Home Health.

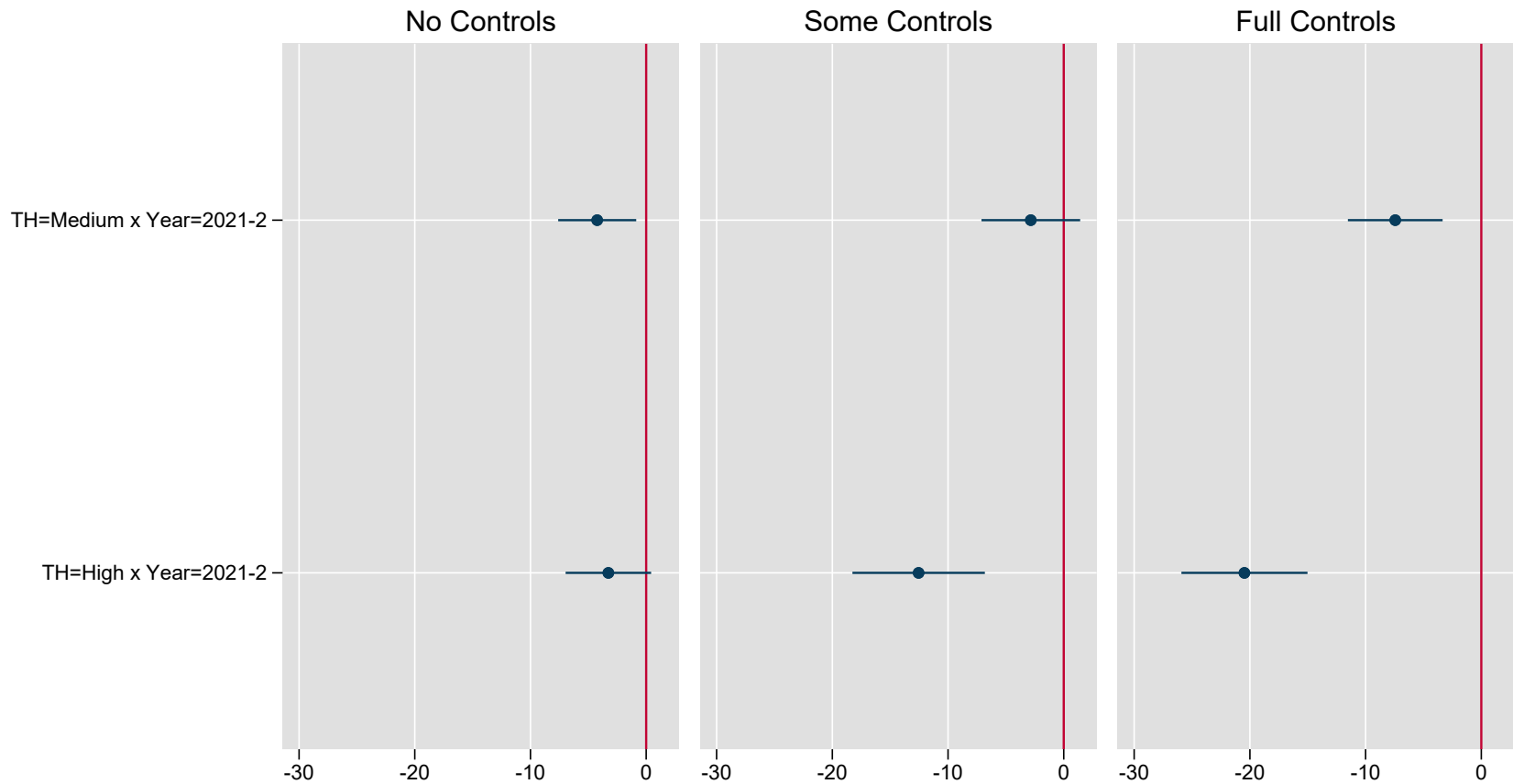


Exhibit B-14.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Home Health.

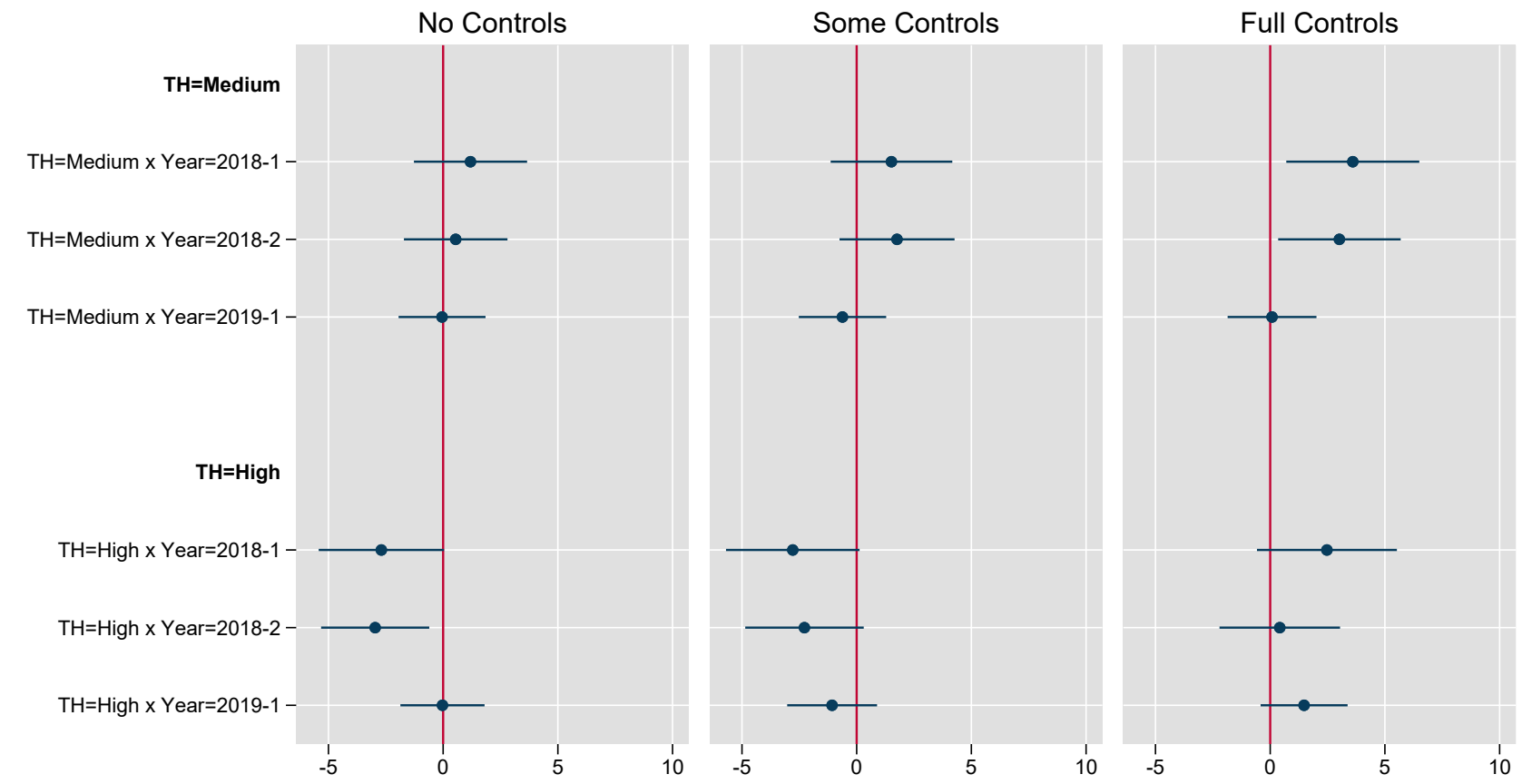


Exhibit B-15.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Hospice** is graphed over Year-Semesters.

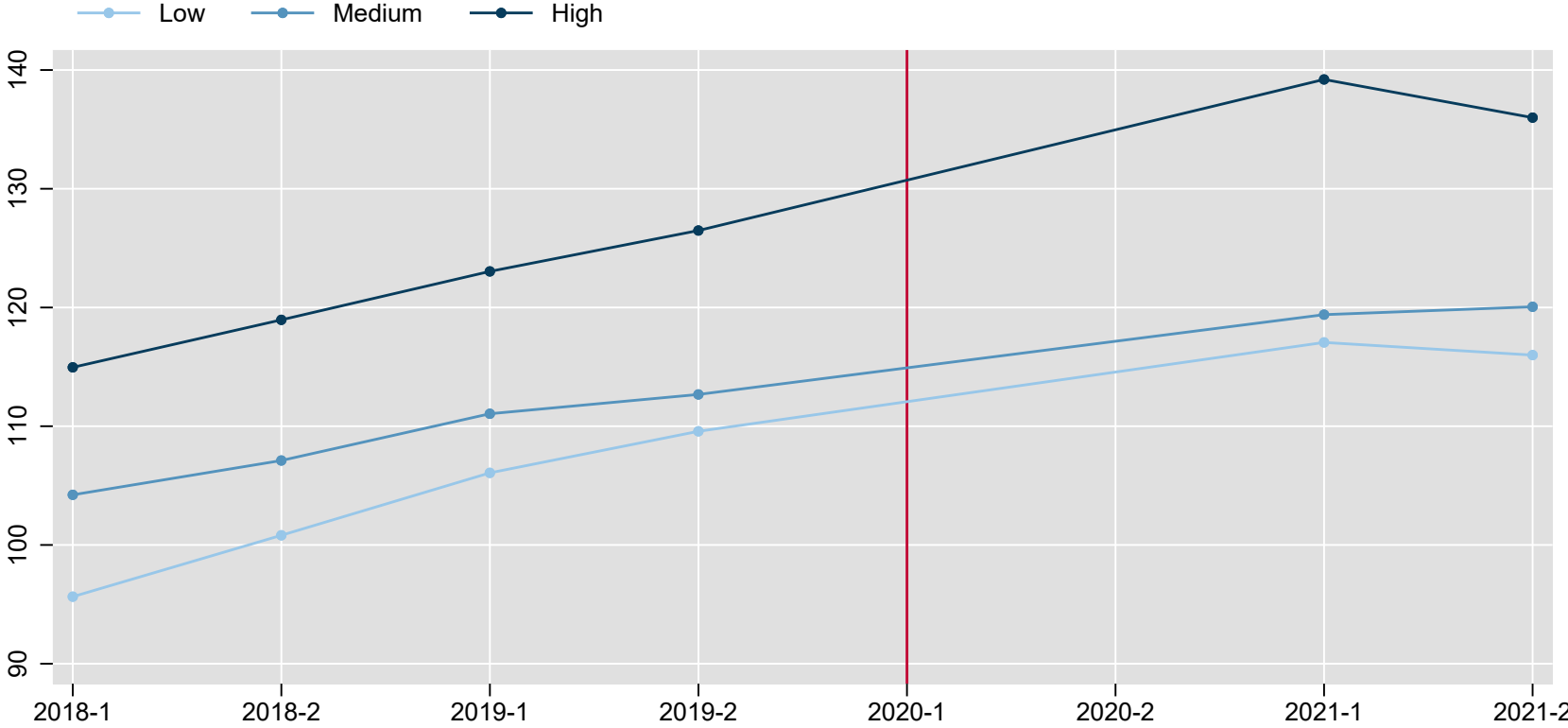


Exhibit B-15.2: Impact Estimates for Total Cost of Care per Beneficiary; Hospice.

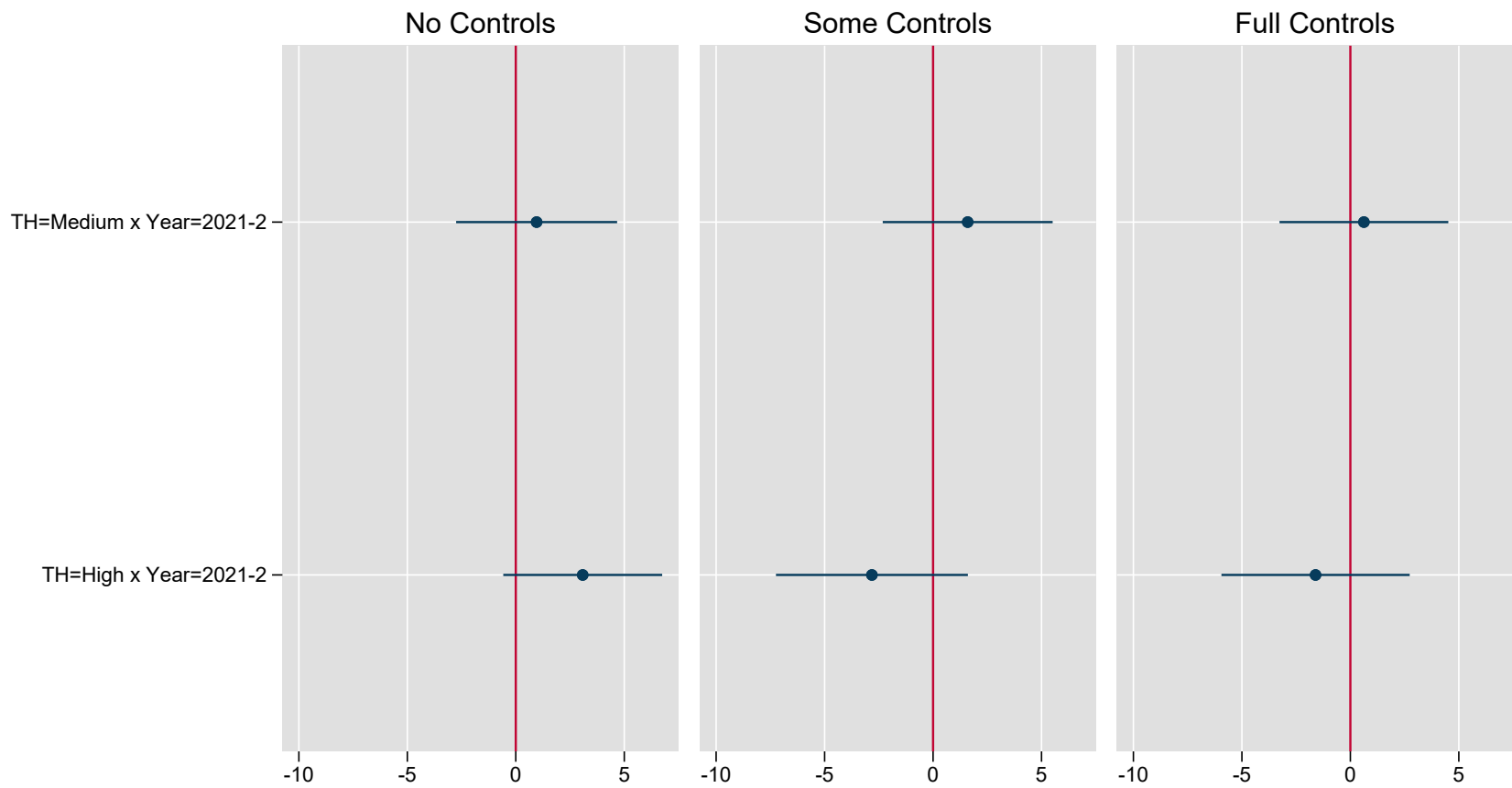


Exhibit B-15.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Hospice.

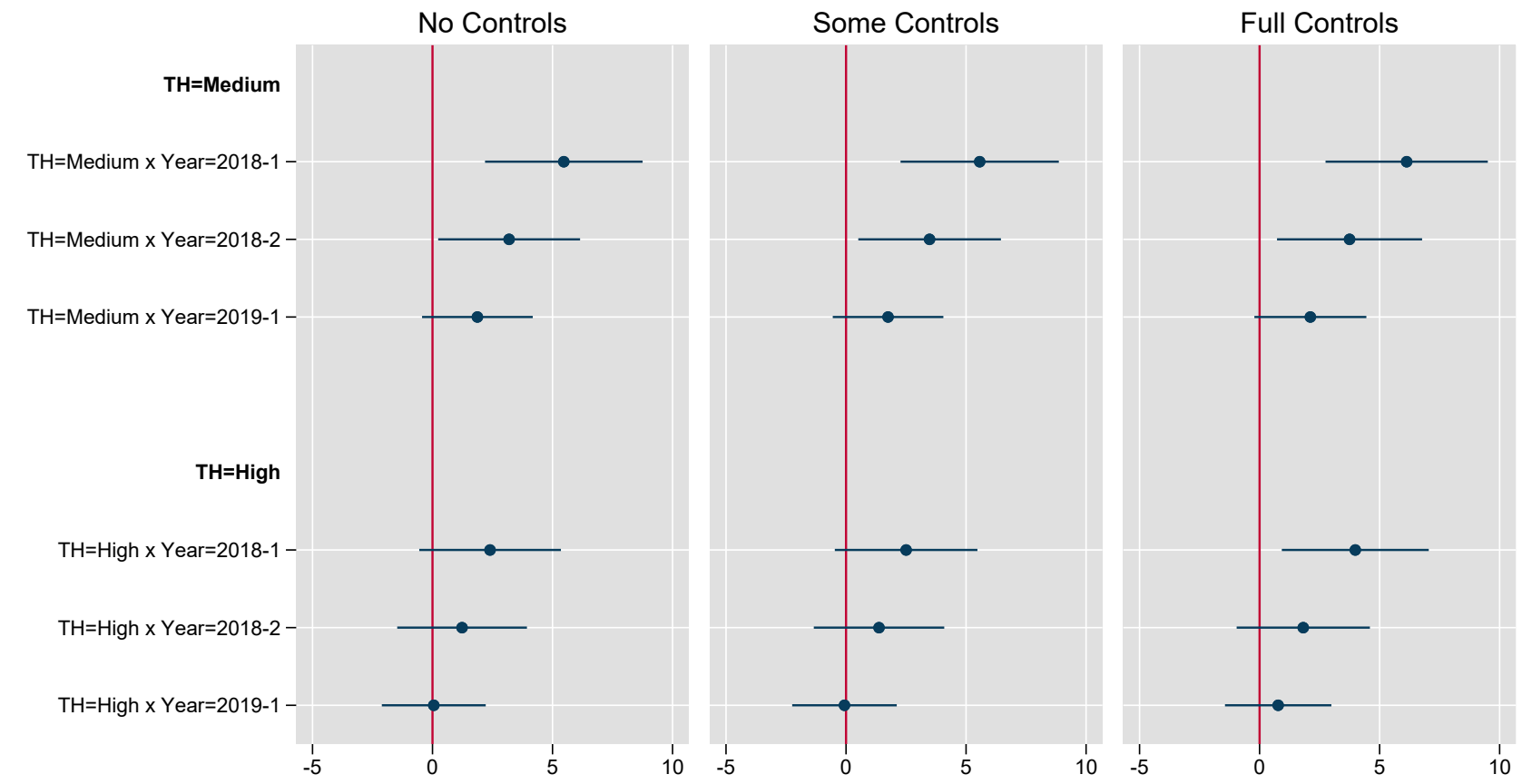


Exhibit B-16.1: HSAs are grouped by their telehealth usage.
Then, average **Total Cost of Care per Beneficiary; Physician** is graphed over Year-Semesters.

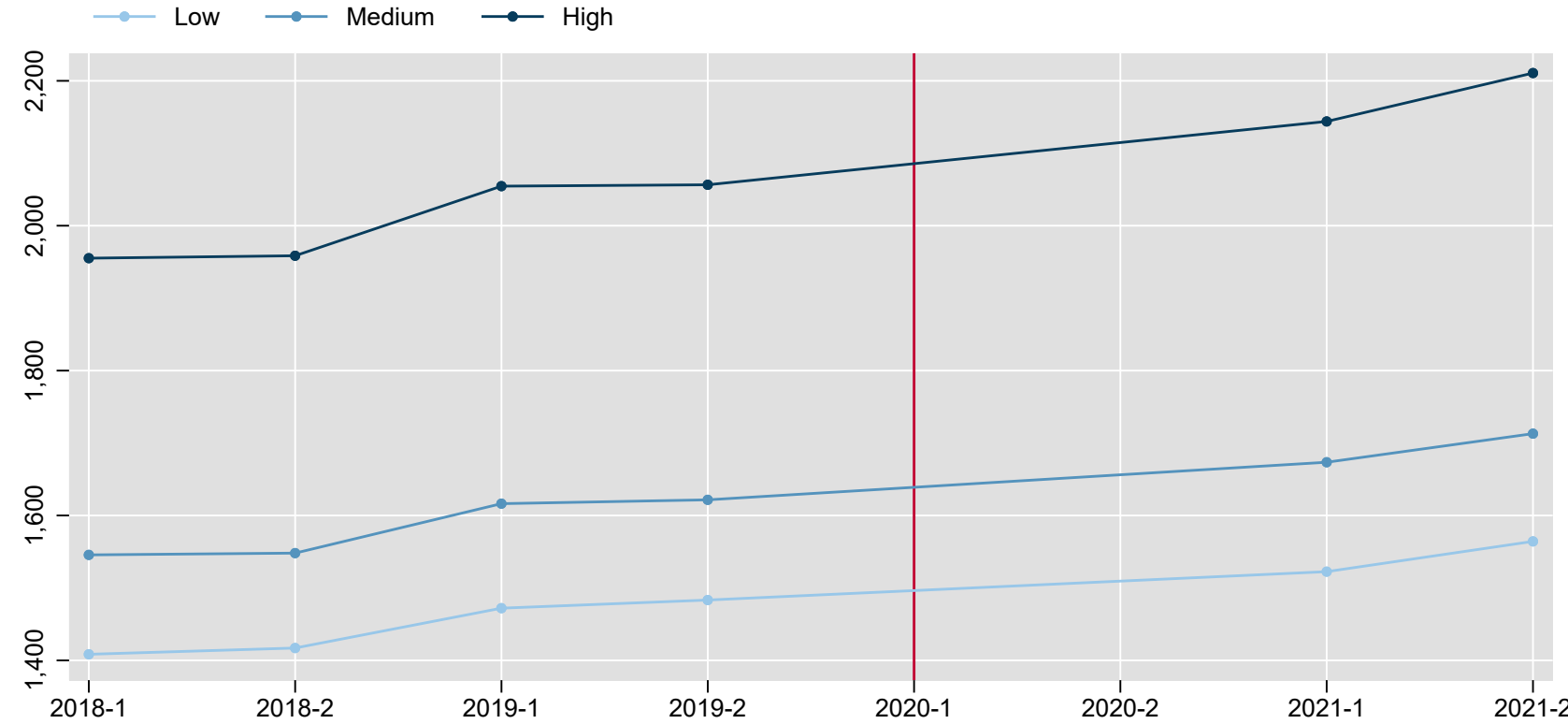


Exhibit B-16.2: Impact Estimates for Total Cost of Care per Beneficiary; Physician.

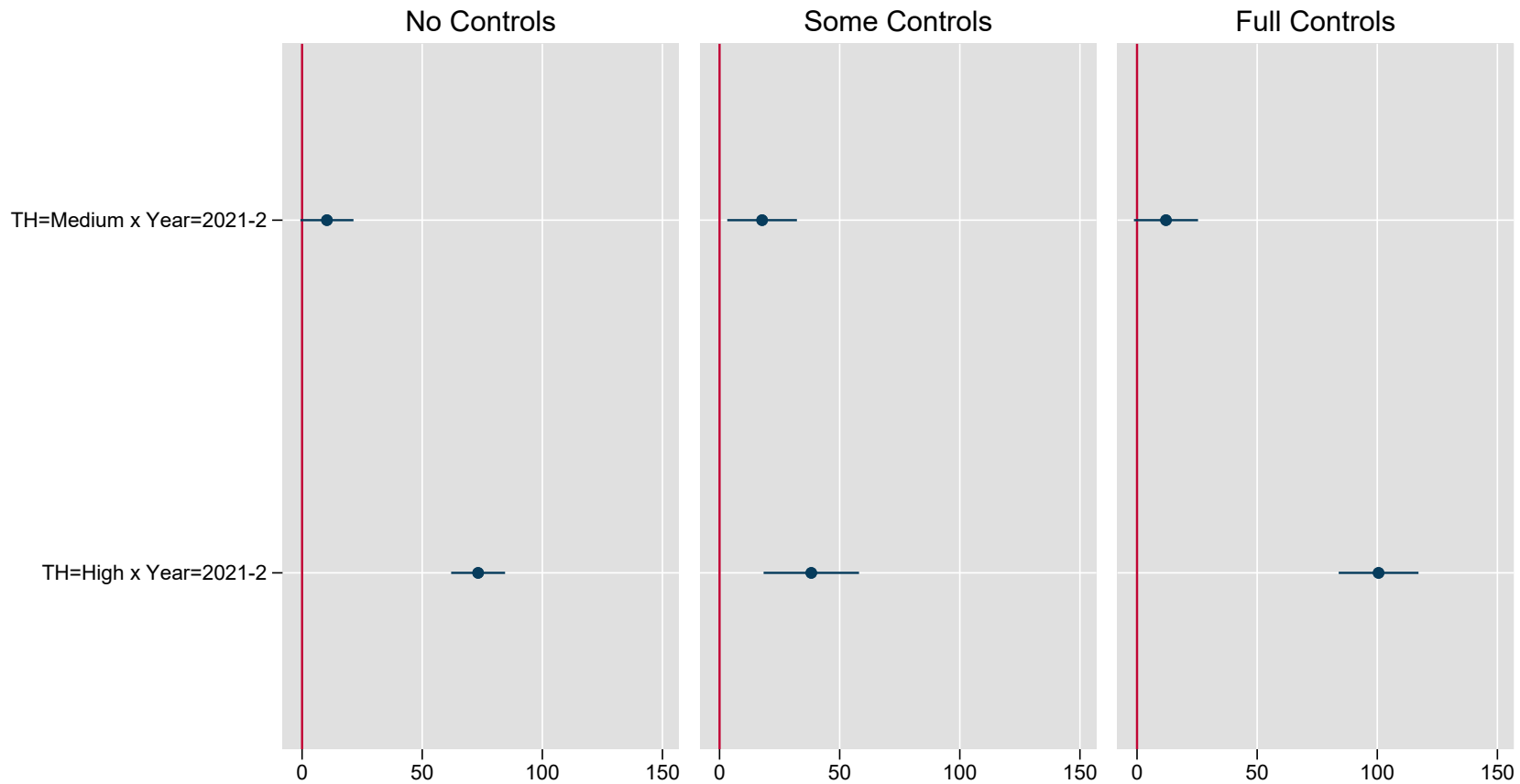


Exhibit B-16.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Physician.

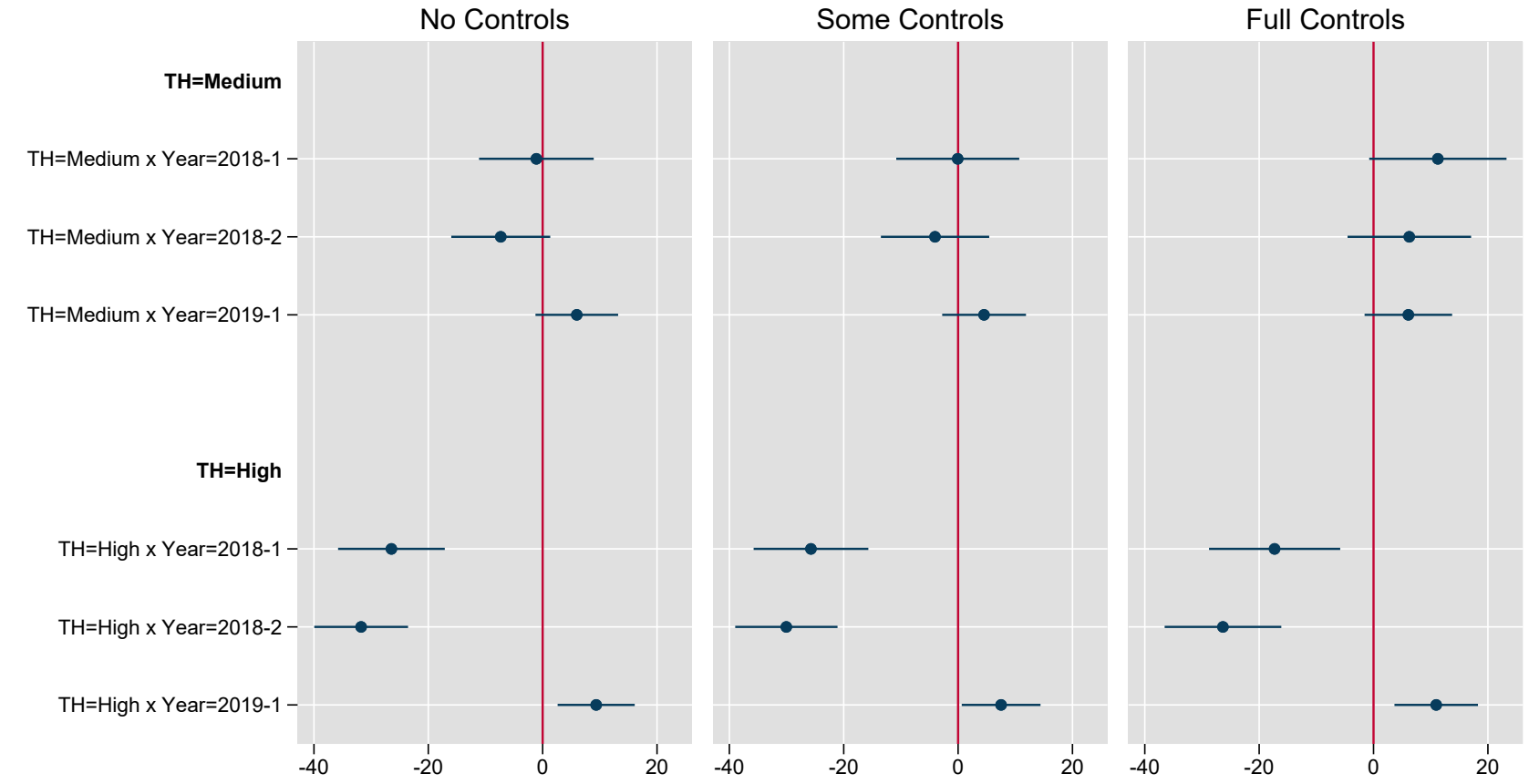


Exhibit B-17.1: HSAs are grouped by their telehealth usage. Then, average **Total Cost of Care per Beneficiary; Durable Medical Equipment** is graphed over Year-Semesters.

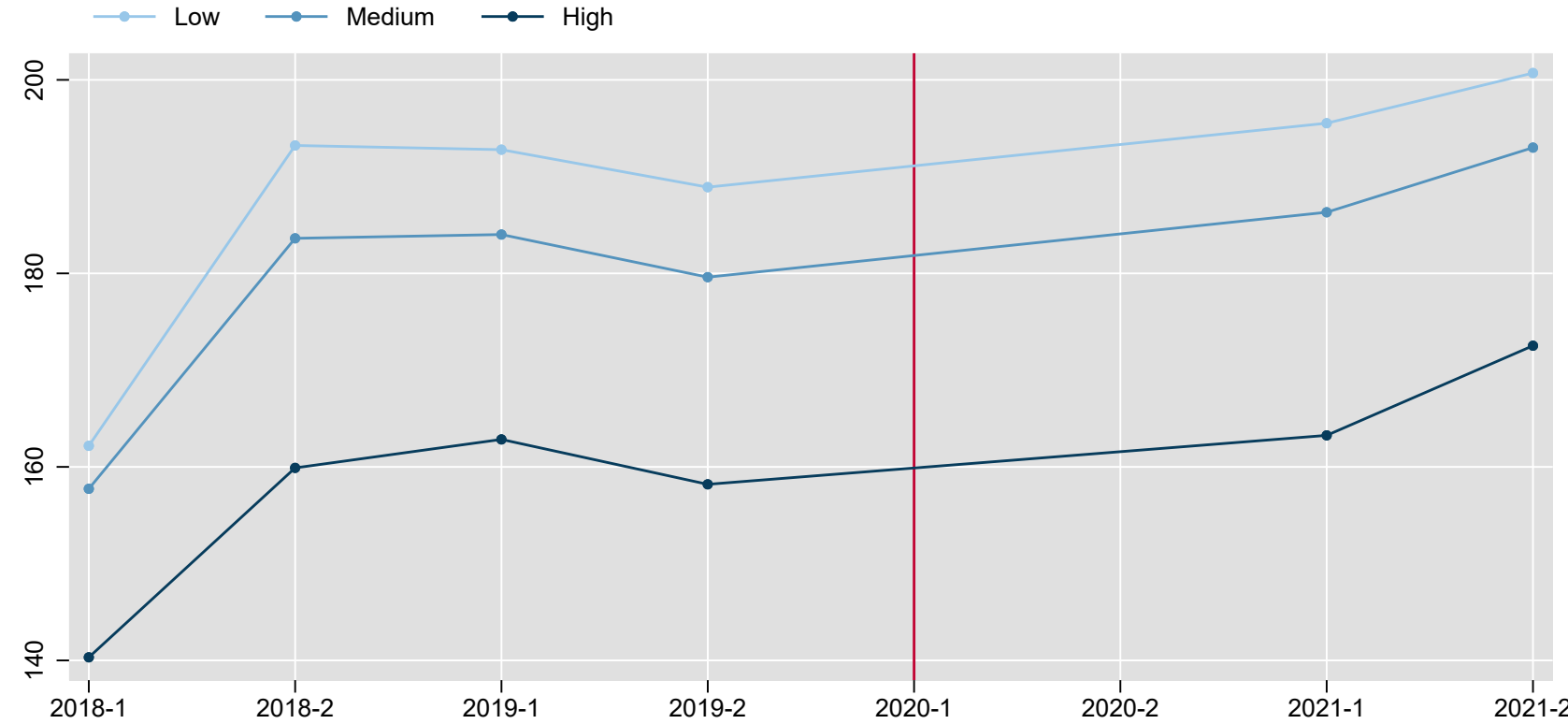


Exhibit B-17.2: Impact Estimates for Total Cost of Care per Beneficiary; Durable Medical Equipment.

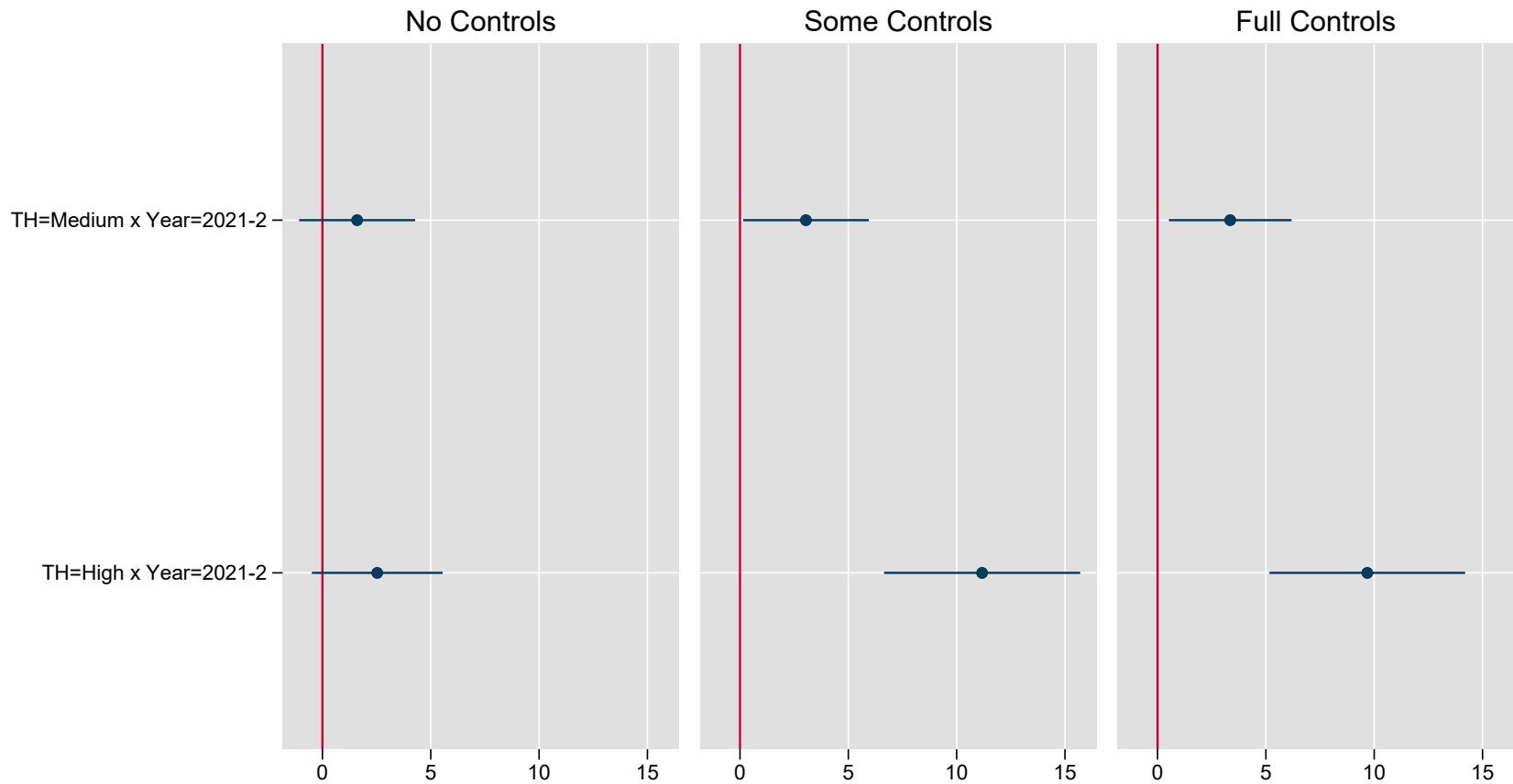


Exhibit B-17.3: Parallel Trends Test for Total Cost of Care per Beneficiary; Durable Medical Equipment.

